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Platoon Leadership Exercises for SIMCAT

ARI Field Unit at Fort Knox, Kentucky
Training Research Laboratory

June 1987

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The exercises are based on the Field Training Exercises described in the ARTEP Mission Training Plan and require the participants to exercise Division 86 SOP and basic C³ principles. The exercises are tailored to the terrain data base and the representational and control capabilities and limitations of SIMCAT.

Eight exercises are presented. Four are tactical road marches, two are offensive missions, and two are defensive missions. For each, lesson plans, operation orders, mission control graphics, controller scripts, and evaluation checklists are included. Also included are SIMCAT operation instructions and guides for the chief controller, opposing forces controller, and the four tank station controllers needed to conduct SIMCAT exercises.

The exercises are suitable for use with Basic Noncommissioned Officer Course, Advanced Noncommissioned Officer Course, Armor Officer Basic Course, and Armor Officer Advanced Course students, and could be used to support TO&E platoon sustainment and professional training for armor leaders. These exercises also provide a base for using SIMCAT to investigate training issues for current and future battlefield conditions. Much of the material in this report will support initial research with PLBS (Platoon Level Battle Simulation), an enhanced version of SIMCAT, which is now being developed.

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Research Product 87-28

Platoon Leadership Exercises for SIMCAT

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Training Simulation

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FOREWORD

Cost, safety considerations, and the restricted availability of suitable training areas limit the amount and realism of the field training that can be provided for small unit armor leaders. The pace, complexity, and lethality of the modern battlefield demand that leaders be well trained before the first battle begins.

Computer-driven battle simulations may provide a needed complement to field training. In addition to the obvious savings obtained by using simulated equipment, fuel and ammunition simulations may offer unique perspectives for providing performance feedback. The Army Research Institute (ARI) has established a research program to identify simulation requirements for training and evaluating tactical skills. As part of this effort, ARI has developed a prototype low-cost battle simulation, Simulation in Combined Arms Training (SIMCAT).

SIMCAT allows participants to serve as the platoon leader, the platoon sergeant, and the two tank commanders for armor platoon missions. This report provides exercises to support research with the SIMCAT battle simulation. Participants in these exercises gain experience and provide information to researchers on how to improve battle simulations and simulation-based training programs.

The exercises are suitable for use with Basic Noncommissioned Officer Course (BNCOC), Advanced Noncommissioned Officer Course (ANCOC), Armor Officer Basic Course (AOB), and Armor Officer Advanced Course (AOAC) students, and could be used to support TO&E platoon sustainment and professional training for armor leaders. These exercises also provide a base for using SIMCAT to investigate training issues for current and future battlefield conditions. Much of the material in this report will also be used to support initial research with PLBS (Platoon Level Battle Simulation), an enhanced version of SIMCAT, which is now being developed.

Research with SIMCAT will be coordinated with projects involving TRAX, BEST (Battlefield Engagement Simulator and Trainer), TACMASS (Tactical Maneuver Simulation), and SIMNET (Simulation Network). These battle simulations vary greatly in the level of fidelity of representation of combat variables. Coordinated research with these simulations will support the development of effective and efficient simulator-based training programs for combined arms operations.

This effort is part of the Fort Knox Field Unit's research program to apply new training technology to Armor skills training. The Field Unit's overall mission is to improve methodology basic to the derivation of Armor training and evaluation requirements and procedures, individual and collective training in Armor schools and operational units, and systems for integrating and managing Armor training. A Memorandum of Agreement covering the application of training technology to Armor skills training, "Establishment of Field Training Technology, Fort Knox, Kentucky," was signed by Headquarters, Training and Doctrine Command (TRADOC), U.S. Army Armor Center (USAARMC),

and ARI on 28 March 87. The SIMCAT has been briefed and demonstrated for the Commanding General, TRADOC and the Commanding General, USAARMC and continuous coordination/briefings have been held for the Technical Director, USAARMC, throughout this developmental effort. Exercises are being developed for SIMCAT in cooperation with the Fort Knox Noncommissioned Officer's Course. A similar effort is under way with the Armor School for the Armor Officer Basic and Advanced Courses.

A handwritten signature in dark ink, appearing to read "Edgar M. Johnson". The signature is fluid and cursive, with the first name "Edgar" being more prominent.

EDGAR M. JOHNSON
Technical Director

PLATOON LEADERSHIP EXERCISES FOR SIMCAT

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Platoon Leadership Exercises for SIMCAT

INTRODUCTION

This report contains training exercises for armor leaders to support training and training research with SIMCAT (Simulation in Combined Arms Training). SIMCAT is a computer driven battle simulation that allows four participants to serve as the Platoon Leader, Platoon Sergeant, and the two Tank Commanders of a Division 86 tank platoon.

SIMCAT can be thought of as an automated terrain board for which the computer system controls vehicle movement rate, resolves the outcome of direct and indirect fire, and performs LOS (line of sight) calculations to determine vehicle intervisibility. No attempt is made to create a highly realistic visual representation of a battlefield. Nor is there a realistic mock-up of the equipment inside a turret. Rather, there is a symbolic representation of the critical combat factors needed to practice C³ skills.

SIMCAT allows the practice of platoon level missions without requiring the resources associated with field exercises. The presence of full tank crews is not required because the gunner, loader and driver positions are simulated by controllers and the computer system. Many SIMCAT exercises can be conducted in the amount of time needed to set up a single field exercise. One drawback of training with SIMCAT is the amount of time needed to train the four tank station controllers to operate the SIMCAT control panels. A minimum of four hours of SIMCAT practice is recommended. Less than thirty minutes is necessary to familiarize trainees with the SIMCAT system before exercises are started.

The exercises in this report are based on STXs (Situation Training Exercises) and FTXs (Field Training Exercises) described in the ARTEP Mission Training Plan. The participants are required to exercise Division 86 SOP and the basic principles of C³ (command, control and communication). The participants, trainees, in these exercises are assumed to have had classroom instruction in C³, but need to practice C³ skills under stress and time pressure. These exercises were designed for Basic Noncommissioned Officer Course (BNCOC), Advanced Noncommissioned Officer Course (ANCOC), and Armor Officer Basic Course (AOB) students who have finished classroom instruction and are preparing for field training. The exercises should also be suitable for TO&E platoon sustainment, pre-NTC training, and professional training for armor leaders.

Each exercise contains a list of prerequisite training tasks for the platoon, leader training tasks, platoon performance standards, and a training and evaluation schedule. Mission FRAGO, OPORD, and operations graphics are also included, as are instructions for the operation of SIMCAT and guides for the Chief controller, OPFOR controller and four tank station controllers. No previous computer experience is required to use these SIMCAT exercises.

Rationale

Initial trials have indicated that SIMCAT may provide a safe and inexpensive method of training C³ skills and offer greater control over critical research variables than can be obtained with field studies. However, two major problems have been encountered in using SIMCAT to support platoon-level training and training research.

One problem is the development of training scenarios. SIMCAT has no "built-in" training exercises or means of evaluating performance. Development of effective scenarios for SIMCAT requires detailed understanding of the total SIMCAT system.

The second problem is the excessive amount of time needed to train the controller operations necessary for SIMCAT exercises. Previous products (Drucker, 1986 and O'Brien, 1986) have supplied controller guidelines that contained considerable detail of SIMCAT operations. Since the publication of those products, several changes have been made in SIMCAT operations to facilitate controller operations. Updated guidelines are needed.

Purpose

1. Provide ready-made scenarios that are tailored for the SIMCAT terrain data base and are appropriate for the representational and control capabilities and limitations of SIMCAT.
2. Supply all materials needed to conduct platoon training exercises with SIMCAT.
3. Minimize the amount of time required to train-up exercise controllers.
4. Minimize the level of computer expertise required to operate SIMCAT.

Product Development

The development of this product was strongly influenced by the TRAX combat gaming system developed by Bessemer (1984a, 1984b). TRAX uses components of the Dunn-Kempf game and features several innovative ways to represent critical combat variables. The TRAX formats for lesson plans and event scripts were copied in the development of corresponding SIMCAT materials.

BACKGROUND

Based on his observations at the National Training Center, Word (1987) argues that the key to combat success is platoon-level training. He urges that training resources be focussed at the platoon level to develop leader skills in situation assessment, supervision and METT-T (Mission, Enemy, Terrain, Troops-Time Available) analysis.

Hannaman (1984^a) has emphasized that small unit armor leaders must make tactical decisions rapidly, often while on the move and under fire. These leaders must execute C³ procedures under time pressure and stress on a battlefield that is so complex and variable that no known set of rules or guidelines can guarantee success or survival. The intensity and lethality of the modern battlefield demand that armor leaders be well trained in tactics and C³ skills before the first battle begins.

Several factors limit the amount, variety, and realism of training that can be conducted for platoon leaders to develop C³ and tactical skills. Traditional nonfield training methods, such as sand table exercises and terrain board based combat games, do not fully represent the time pressure and C³ problems that are encountered in the field (Henricksen et al., 1985).

Although recent improvements in field training devices and techniques such as MILES (Multiple Integrated Laser Engagement System) have increased training realism, the amount and variety of field training are greatly limited by cost, safety considerations and the limited availability of suitable training areas (Brown, 1983).

Wheaton and Boycan (1982) pointed out that when large-scale MILES exercises are conducted the complexity of action makes it difficult for individual platoon leaders to recognize how their specific actions and inactions contribute to mission outcome. Indeed, standard training procedures, as described in the Tank Platoon ARTEP Mission Training Plan, require an experienced armor leader to conduct an AAR (After Action Review) to evaluate the performance of junior officers. The performance feedback presented to small unit leaders is thus almost always delayed and is frequently imprecise.

Hannaman (1984^b) has recommended computer driven battle simulations as low cost complements to field training. Computer simulated combat can be less expensive than the operational and maintenance costs associated with field training.

Safety considerations that limit many aspects of field training would not limit simulated combat. For example, combined arms operations fought at close quarters on hazardous terrain during limited visibility conditions could be safely simulated. Tactical decision-making under extreme stress, such as prolonged sleep deprivation, could be safely measured.

Simulated terrain is, theoretically, unlimited in extent and variety. Terrain representing specific geographic areas can be simulated to allow mission rehearsals in areas that otherwise would be unavailable for training.

The ARI (US Army Research Institute) has established a research program to identify simulation requirements for providing C³ and tactical training for modern and future battlefield conditions. As part of this effort, ARI has developed SIMCAT, a prototype platoon level battle simulation. SIMCAT can be characterized as a low fidelity simulator. No attempt is made to present a highly realistic representation of the inside of a tank or of a battlefield scene. Instead, SIMCAT seeks to represent critical combat factors in an abstract or symbolic manner. Jones, Hennessy, and Deutsh (1985) have pointed out that low fidelity simulators may be especially useful for teaching skills that are based more on information processing than equipment operation. Thomason (1983) argues that for some early stages of training practice with low fidelity simulators may provide better training than practice with simulators with higher fidelity or practice with actual equipment.

Initial surveys of instructors of tank commanders and platoon leaders indicate that SIMCAT may provide valuable C³ training. Even experienced TO&E platoons reported that SIMCAT practice allowed them to develop and sharpen their C³ SOP. However, at present, no research has been performed to determine if SIMCAT practice transfers to field performance.

DESCRIPTION OF SIMCAT

SIMCAT allows four participants to serve as TCs (Tank Commanders) of simulated M1 tanks. Each TC has a computer monitor display indicating the location of his tank and any other vehicles that would be in line of sight. The location and orientation of each vehicle, and gun tube orientation, are indicated by a computer-generated graphic icon, which is superimposed at the appropriate location on a map display. (For a detailed technical description of SIMCAT see Kristiansen, 1986.)

At each TC station a controller represents the rest of the tank crew, i.e., loader, gunner and driver. To control the movements and firing of his tank the TC issues commands aloud as he would do in a tank. The station controller uses a touch sensitive panel to input the TC's commands.

Platoon and Company communication nets allow practice of standard CEOI procedures. For communication purposes a Chief Controller serves as the Company Commander and also represents the FIST (Fire Support Team) during calls and adjustments for indirect fire.

An OPFOR controller commands T72s and BMPs armed with SAGGERS to provide an active, intelligent threat. The OPFOR controller can also employ indirect fire.

Each U.S. tank is independently controlled by an individual TC. The platoon leader is therefore required to use the communication nets, and hand and arm signals to insure that the four tanks operate as a platoon.

SIMCAT is not a gunnery trainer. Gunnery is represented only to the extent necessary to allow the TC to practice the C³ aspects of main gun engagement. That is, the TC can decide which target to engage, issue a fire command, and observe and report the engagement outcome.

The SIMCAT maneuver area is a 6 km by 20 km section of terrain running northwest (Brandenburg, KY) to southeast (Ft Knox Military Reservation). This is not ideal tank country and presents many C³ challenges.

SCENARIO DESIGN GUIDELINES

The SIMCAT training scenarios (Appendexes F thru J) were developed according to two sets of guidelines. One set related to simulation and modeling capabilities and limitations specific to SIMCAT. Familiarity with these factors, described by O'Brien (1986), is not required for the use of the scenarios presented in this report, but would be necessary for the creation of additional SIMCAT scenarios. For example, a few sections of the SIMCAT terrain data base are not coded as accurately as the other sections are coded. The scenarios in this product were constructed so that critical events do not occur in the less accurately coded terrain sections.

The other set of guidelines included factors that should be considered in the development of any training scenarios, whether for use in the field or on simulated terrain. Effective platoon-level mission training exercises require careful and detailed construction. Background materials should be presented in sufficient detail to allow METT-T analyses throughout the training exercise. Exercise events should be carefully scripted to insure that appropriate training points are addressed in a logical order and at an acceptable pace. Scripting OPFOR actions, that is, specifying where, when and how OPFOR engagements occur, reduces the variations in OPFOR skill level and motivation. These variations increase the difficulty of evaluating platoon and platoon leader performance. Scoring standards should be appropriate for the mission and terrain. This level of detail in constructing mission scenarios is important for training and is critical for research and evaluation applications.

DESCRIPTION OF EXERCISES

The SIMCAT exercises are based on the training exercises outlined in FC 17-15-1 (Tank Platoon Army Training and Evaluation Program Mission Training Plan). Exercise event scripts and mission graphics have been tailored to correspond to the road nets and significant terrain features in the SIMCAT terrain data base.

The exercises are designed to insure that situations occur that should force the tank platoon to perform the tasks listed for the STX. The exercises will require decisions and battlefield actions based upon the platoon leader's analysis of mission, enemy, terrain, troops, and time available (METT-T). Because of the limitations of SIMCAT all aspects of some of the AMTEP tasks cannot be performed. (An analysis of the subtasks that can be

trained fully, partially, or not at all with SIMCAT is presented for each exercise). The primary aspects of the tasks that can be practiced on SIMCAT are those related to command, control and communication. Tasks that are specifically related to the vehicle, such as maintenance, cannot be practiced on SIMCAT because no mock-up of actual equipment is presented.

The exercises are designed to demonstrate to the platoon leader the critical relationship between planning and mission outcome. The platoon leader learns to anticipate potential C³ problems rather than reacting to trouble after it occurs. The ability to time share tasks is developed; for example, the platoon leader must report to higher command, control his platoon and command his tank.

These exercises can be used individually or in combination with other exercises to form extended, integrated missions. Thus, a roadmarch can be grouped with a passage of lines and a movement to contact in the same manner recommended to form a Field Training Exercise (FTX) in FC 17-15-1.

CONTROLLER REQUIREMENTS

Six controllers are needed to support the SIMCAT training exercises presented in this document. No previous computer operation experience is required for any of the controllers.

Chief Controller

One Chief Controller is needed. The Chief Controller represents the company commander and FIST (Fire Support Team) on the company communications net. He also types in, at the computer keyboard, the coordinates for calls for indirect fire by the Friendly Forces. (The OPFOR controller can assist with indirect fire procedures if necessary.) The Chief Controller should have sufficient knowledge and experience in armor operations to conduct an AAR (After Action Review) of platoon performance. SIMCAT operation instructions for the Chief Controller are presented in Appendix A.

OPFOR Controller

One OPFOR Controller is needed. The OPFOR Controller directs the movement and firing of all OPFOR vehicles and controls OPFOR indirect fire. All OPFOR actions are entered through a touch sensitive panel; no typing skills are needed. No knowledge of threat tactics is required because the OPFOR actions have been carefully scripted for each scenario. SIMCAT operation instructions for the OPFOR Controller are presented in Appendix B.

SIMCAT Station Controllers

Four Station Controllers (SCs) are needed. As the trainee, acting as TC, issues commands the SC inputs these commands using a touch panel. No typing is required. The SC should have some understanding of tank formations and movement techniques, the wingman concept, and standard fire commands because he serves as the gunner, loader and driver. SIMCAT instructions for the SCs are presented in Appendix D.

Instructors, crewmen (any position) or other trainees waiting to act as TCs can serve as SCs. However, SCs must be provided considerable time to practice on SIMCAT before formal exercises are started. A minimum of 2 two hour practice sessions is recommended.

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APPENDIX A
CHIEF CONTROLLER GUIDE

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June 1987

Appendix A Chief Controller Guide

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APPENDIX A

CHIEF CONTROLLER GUIDE

Introduction

These instructions describe the operations you will perform with SIMCAT during the conduct of any of the exercises presented in Appendixes F-M. Each exercise includes company warning orders, operations orders, mission control graphics, exercise event scripts, and performance standards checklists. These support-materials allow you to concentrate on evaluating platoon leader and platoon performance.

During an exercise you represent the Company Commander and FIST on the company radio net. You also select battlefield views to support the During Action Reviews (DARs) and AARs and control Friendly indirect fire. The Company Commander is represented only to the extent necessary to portray realistic company net communications for the platoon leader (trainee). While representing the Company Commander, you do not actually control a vehicle or report to higher headquarters.

Station Description

The color monitor (#1) in Figure A-1, displays the battlefield. The monochrome monitor (#2), lists the choices of battlefield views and presents the procedure for indirect fire. Commands are entered by typing letters or numbers at the keyboard (#4). The communications control box (#5) is described immediately below.

Communications

The communications control box at the Chief Controller station should be switched to the company net. During an exercise you wear a head set containing a microphone and single head phone. You must depress a foot pedal when you wish to speak on the company net.

The communications control box also has switch settings for the platoon net and for the OPFOR controller. These settings are usually not needed. You wear a head set, not a CVC helmet, and can therefore hear the platoon leader give commands on the platoon net, and to his crew, without switching to the platoon net. You can also easily talk with the OPFOR controller without using the communication system.

The communication control box also has a switch which allows you to jam, that is flood with white noise, either the company or platoon net. Use caution! The loudness of the white noise can far exceed that which is necessary to completely jam a net. Jamming should never be used at or near the maximum volume setting.

Keyboard Control

The monochrome monitor at the Chief Controller station lists options which can be selected during exercises. These are:

- F MONITOR FRIENDLY FORCES
- O MONITOR OPFOR FORCES
- W DISPLAY WORLD VIEW
- A ALLOCATE INDIRECT FIRE
- D DEACTIVATE MINE FIELDS
- R RETURN TO MAIN MENU

The capital letter indicates the letter that the controller should type at the keyboard to select that option. In the instructions that follow, commands that should be typed in at the keyboard are shown in bold print. For example, **1** indicates that you should press the **1** key at the top left of the keyboard. (Typing a lower case **L** instead of the number **1** or typing the letter **O** instead of **0** (zero) will lead to system errors.)

After typing **F**, MONITOR FRIENDLY FORCES, you must choose which of the four tanks to monitor:

- 1** TC1
- 2** TC2
- 3** PS
- 4** PL
- R Return

Typing **4** will allow the you to see the exact display which is at the platoon leader station. If the display at the platoon leader station changes, as would happen if the vehicle drove onto a new map area, the display will also change at the controller station. Type the **ESC** key, in the upper left of the keyboard, to exit a particular view and return to the menu.

Type **W** to obtain the World View. The World View is a 6000 x 4000 meter view of the terrain centered on the platoon leader's tank. All vehicles within the terrain area are displayed without regard to line of sight. Friendly vehicles are depicted as blue squares, OPFOR vehicles as red squares. Destroyed vehicles do not appear on the World View.

You should use the World View to quickly determine platoon location and formation and interval. For much of the exercise you should monitor the platoon leader's view.

Indirect Fire

Typing A will produce the screen for allocating indirect fire. You must type in the two 4-digit grid coordinates for the center of the desired impact area. Hit the return key after each 4-digit number. Indirect fire will appear as explosion symbols at all stations that currently have the impact area displayed. Indirect fire will land within six seconds, therefore the controller should delay an appropriate amount of time between when the platoon leader calls for fire and when it should land. (Indirect fire called for from the OPFOR station is identical in appearance to Friendly indirect fire. You may wish to indicate the desired impact area to the OPFOR controller and have the OPFOR controller handle Friendly indirect fire from the OPFOR station.)

During Action Reviews

One of the advantages to training with SIMCAT is that you can stop action during an exercise, make comments and suggestions, and then proceed from the stop point. You can also "go back in time" to allow the platoon a second chance at some critical part of the exercise. (The procedures for stopping and restarting exercises are presented in the next section. The procedures for shutting down the system are listed in Appendix E. Although these procedures are performed on the keyboard at the Chief Controller station, you may elect to concentrate on the DAR while another controller types in the necessary commands).

Restarting an Exercise

An exercise can be restarted, to the nearest minute, from the point at which it was stopped, from the point at which it was last started or from any point in between.

Restart Procedure:

1. Repeatedly press the ESC key until the message "CTRL + ENTER to Stop Current Initial Conditions" appears.
2. Simultaneously press CTRL and the ENTER key.
3. The SIMCAT Scenarios screen will appear. Type 2.
4. The Restart Scenario options will appear. Type:
 - 1 to restart the exercise from the point at which it was last started.
 - 2 to restart from the end point.or
 - 3 to start the exercise at a point in between.

5. If you selected 3, you must indicate the point in time that the exercise should be restarted. The range from which you can choose will be specified on the screen. For example, if the duration of the exercise was 16 minutes you can restart the exercise at any point from 0 (the original starting point) to 15 (one minute prior to the ending point).

6. Decide at what point you want to restart the exercise. Then type the number corresponding to that point. Because the number must contain four digits, enter a 0 for each unused digit. Press the Enter key after the number has been completely typed. For example, if you want to go back to minute 3, type

0 0 0 3 and press Enter

If you want to go back to minute 12, type

0 0 1 2 and press Enter

WARNING: Once an exercise is restarted, it can never be restarted again from an earlier point. For example, if the duration of the exercise was 16 minutes and the scenario was started at minute 12, the exercise can never be restarted from minutes 0 to 11.

7. The display will begin to appear on the color monitors in about 30 seconds. If a vehicle appears on a monitor, but the terrain display does not, press either the MID RANGE or FAR RANGE label on the control panel at each station where the terrain display is missing.

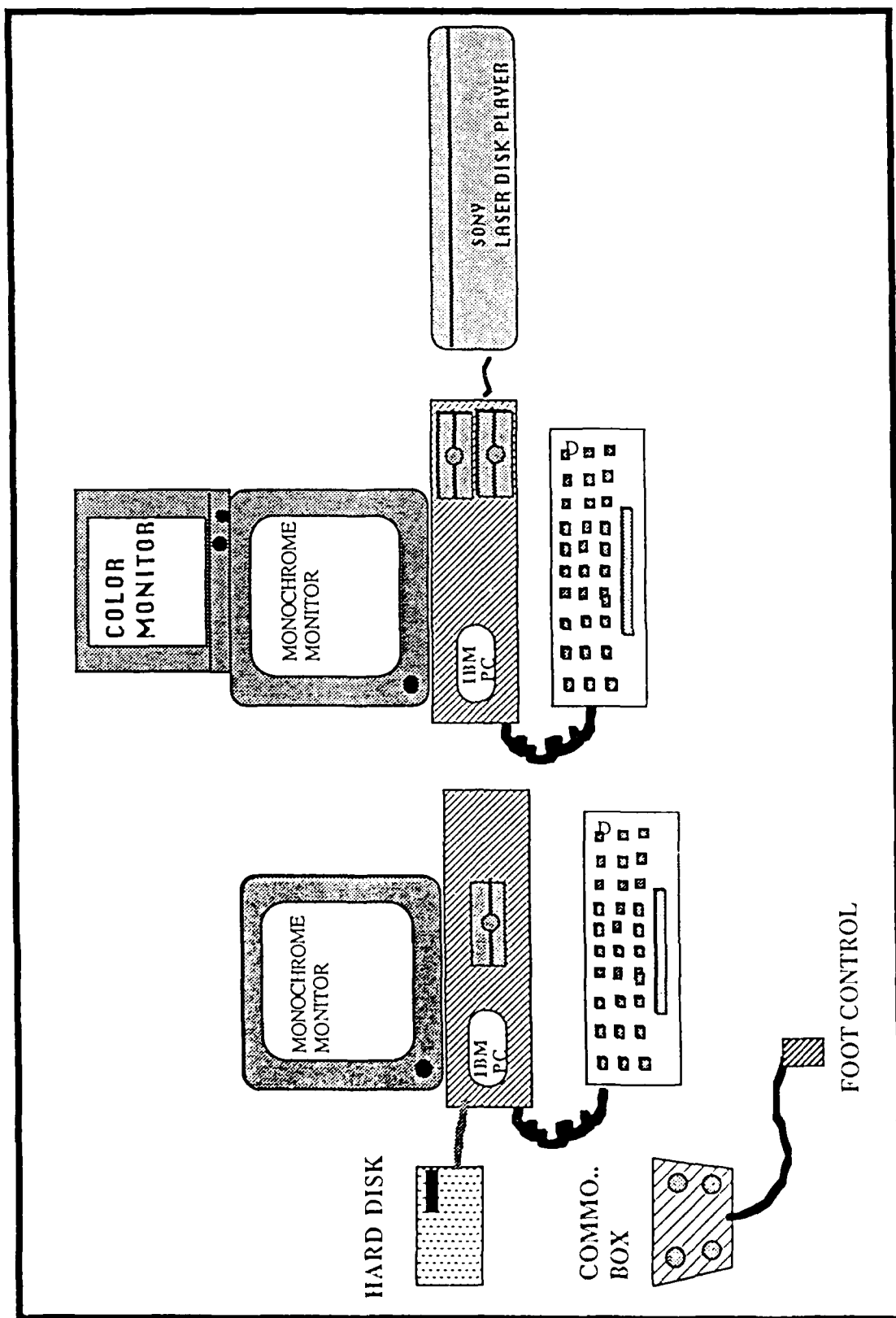


Figure A-1. Fileserver and Chief Controller Station Configuration.

APPENDIX B
OPFOR CONTROLLER GUIDE

Don Lampton
ARI, Fort Knox, Kentucky

June 1987

Appendix B OPFOR CONTROLLER GUIDE

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APPENDIX B

OPFOR Controller Guide

Introduction

The OPFOR Controller is responsible for the movement and firing of all OPFOR vehicles which are active during a scenario. He also controls indirect fire. The OPFOR Controller does not play "against" the Friendly forces. The goal of the OPFOR Controller is not to "beat" the Friendly forces but rather is to produce situations that ensure that proper training points are addressed. The OPFOR Controller is provided with event scripts and maps, and directed by the Chief Controller, to produce OPFOR actions which are consistent with Threat tactics and which support training points.

At the beginning of each exercise the OPFOR vehicles are already in the correct location and formation and are oriented properly for the actions called for in the OPFOR script. The OPFOR controller is not required or allowed to develop OPFOR plans or tactics. The challenge to the OPFOR controller is to simultaneously control the movement and firing of several OPFOR vehicles.

Station Description

The color monitor (#1) in Figure B-1, displays the battlefield. The monochrome monitor (#2) presents vehicle information. The keyboard at the OPFOR station is not used during exercises, all commands are given using the control panel (#3).

OPFOR CONTROL PANEL

The OPFOR control panel (see Figure B-2) allows the OPFOR Controller to control vehicle movement and firing and to control indirect fire. In the instructions that follow, commands that should be entered with the control panel are shown in bold print.

The panel allows you to send commands to the computer without requiring you to type commands on a keyboard. To send a command, lightly roll the tip of your finger over the area within a command box. For example roll your finger over the **STOP** command box which is found in the DIRECT UNIT MOVEMENT section in the center of the control panel. You should hear a faint 'click' sound come from the computer when you properly press a command box. Little pressure is needed to activate the command boxes. Pressing too hard will damage the control panel. Occasionally you may hear a double click. This is undesirable. Practice pressing the **STOP** command so that you can determine the least amount of pressure needed to reliably produce a 'click'. To use the directional arrows, in the lower right corner of the control panel, press the "arrow head" of the arrow you wish to select.

Vehicle Control Selection

Vehicles are controlled individually (with the exception of some aspects of direct fire that are discussed later). The Direct Unit Selection section, in the upper left corner of the control panel, allows the selection of a particular vehicle to be controlled. When a vehicle is selected the display at the color monitor will change to show that vehicle and its surrounding terrain. The vehicle under control is shown with a green turret.

Each OPFOR vehicle is assigned a number for control purposes. Pressing **SHOW UNIT STATUS**, top center of control panel, will produce on the monochrome monitor a list of the available OPFOR vehicles for the current exercise. The list contains the vehicle control number, the type of vehicle (BMP or T72) and vehicle status and location. The number of the vehicle which is presently being controlled from the control panel will flash.

Movement

The Direct Unit Movement commands are at the center of the control panel. Press **MOVE OUT** to start vehicle movement. Vehicle speed will continue to increase until the maximum speed for that terrain type is reached or until you press **STDY ON** (Steady on). The commands **SPD UP**, for Speed UP, **SLOW DOWN**, and **STDY ON** are used to control vehicle speed. **TURN RIGHT** (Turn right), which works only when the vehicle is already moving, will cause the vehicle to continuously turn to the right until you press **STDY ON** or **STOP**. You must develop a sense of timing for using **STDY ON** so that the vehicle will have the desired speed and direction.

When moving, the vehicle will appear to cross the map display. As the vehicle approaches the "edge" of the screen the picture will briefly black-out. A new map picture will be shown and the vehicle will appear at the center of the screen. Other vehicles will pop in and out of sight as you drive up and down hills and through wooded areas. Remember that the screen will only display those vehicles that you could see if you were on the ground at the spot of your vehicle symbol. You can not see other vehicles which are on the other side of the hills from you and you can not see very far into heavy woods. Use the map contour lines to estimate your actual field of view.

Current speed, in kilometers per hour, is shown in the green box at the lower right of the color display screen. Maximum speed is determined by the type of terrain being crossed. Terrain types and corresponding maximum speeds are listed below.

MAX SPEED

TERRAIN	FORWARD	REVERSE
Primary Road:	70 KPH	25 KPH
Secondary Road:	55 KPH	25 KPH
Cross-Country:	35 KPH	25 KPH
Trail:	25 KPH	25 KPH
Woods:	15 KPH	15 KPH
Water:	3 KPH	3 KPH

When a vehicle crosses from one terrain type into a different type of terrain the computer system will automatically decrease vehicle speed, if necessary. For example, if you are going 40 KPH on a primary road (for which the maximum speed is 70) and you leave the road to go cross-country the speed will be automatically reduced to 35 KPH (the maximum speed for cross-country terrain). However, if you go from cross-country onto a road you will not automatically speed up. You will have to press **SPD UP** to increase speed. If your speed drops to 3 KPH this indicates that you have come too close to water, such as a pond or stream. Wait until you have cleared the water then increase speed.

Direct Fire

Direct fire engagements are controlled with the Set-up Direct Fire Engagement commands which are in the left center of the control panel and the Execute Engagement commands, right center.

As with controlling vehicle movement you must first use the Direct Unit Selection command to select the vehicle to fire. Then select **MID RANGE** or **LONG RANGE**.

You can only engage visible US vehicles. If a target which you wish to engage is visible on the color display follow the steps below.

1. Press **SELECT TGT** (Select target). If you are controlling a BMP the message "Select Weapon System" will appear on the screen. Press **MISSILE** if you wish to fire a SAGGER or press **MAIN GUN** if you wish to fire the BMP 73mm main gun.

2. A gray cross hair will appear on one of the visible targets. If the cross hair is on the intended target press **ACCEPT** otherwise press **NEXT TGT** until the cross hair appears on the desired target.

3. Press **FIRE ONE** to commence firing with the vehicle under control or select a different vehicle, repeat steps 1 and 2 and then hit **FIRE ALL** for volley fire.

Indirect Fire

1. Press **SELECT** in the Indirect Fire Engagements section at the lower left of the control panel.
2. A red cross will appear at the center of the display monitor. Use the direction arrows, at the lower right of the control panel, to move the cross hair to the desired impact spot.
3. Press **MARK** at the center of the direction arrows.
4. Wait to press **FIRE** until 6 seconds before you wish the rounds to land.

Forecast Movement

The Forecast Movement commands allow you to enter routes for individual vehicles to follow. Routes may be traced before an exercise begins.

Procedure:

1. Select a vehicle by pressing a number in the Direct Unit Selection section.
2. Press **FORECAST ROUTE** in the Forecast Movement section on the left side of the control panel. A cross hair will appear on the vehicle.
3. Use the directional arrows, lower right of control panel, to move the cross hair. Press **MARK** to draw a line from the vehicle to the cross hair. This line represents the route the vehicle will follow. Use the directional arrows to specify additional route subsections, pressing **MARK** at the end of each subsection.
4. Press **ACCEPT** in the Forecast Movement section to store the completed route.

Press **MOVEOUT** when you want the vehicle to begin to move along the forecasted route. Vehicle speed may be changed during the route, by using **SPD UP**, **SLOW DWN**, or **STDY ON**, but using either of the turn commands will cancel the rest of the route.

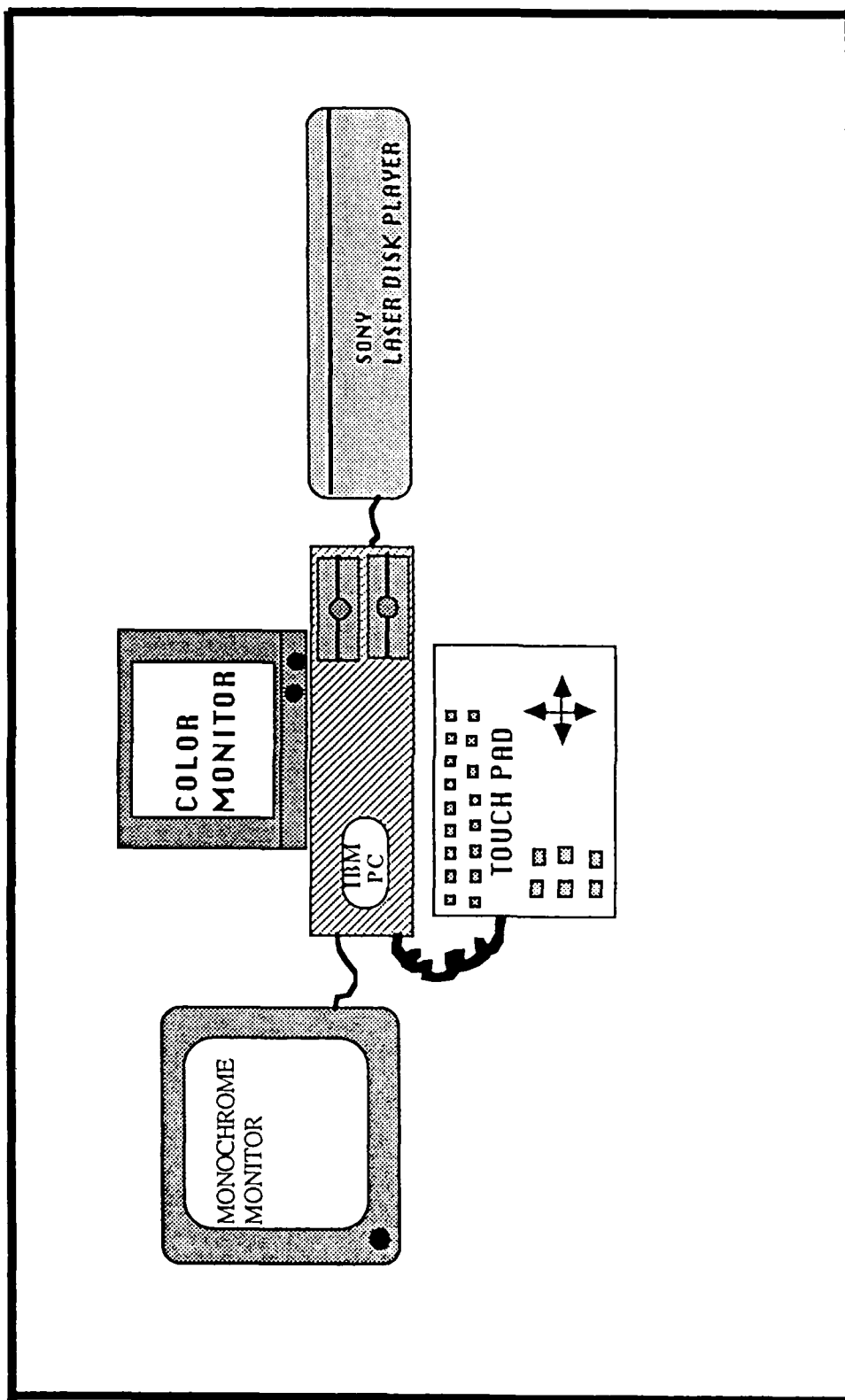


Figure B-1. OPFOR Controller Station.

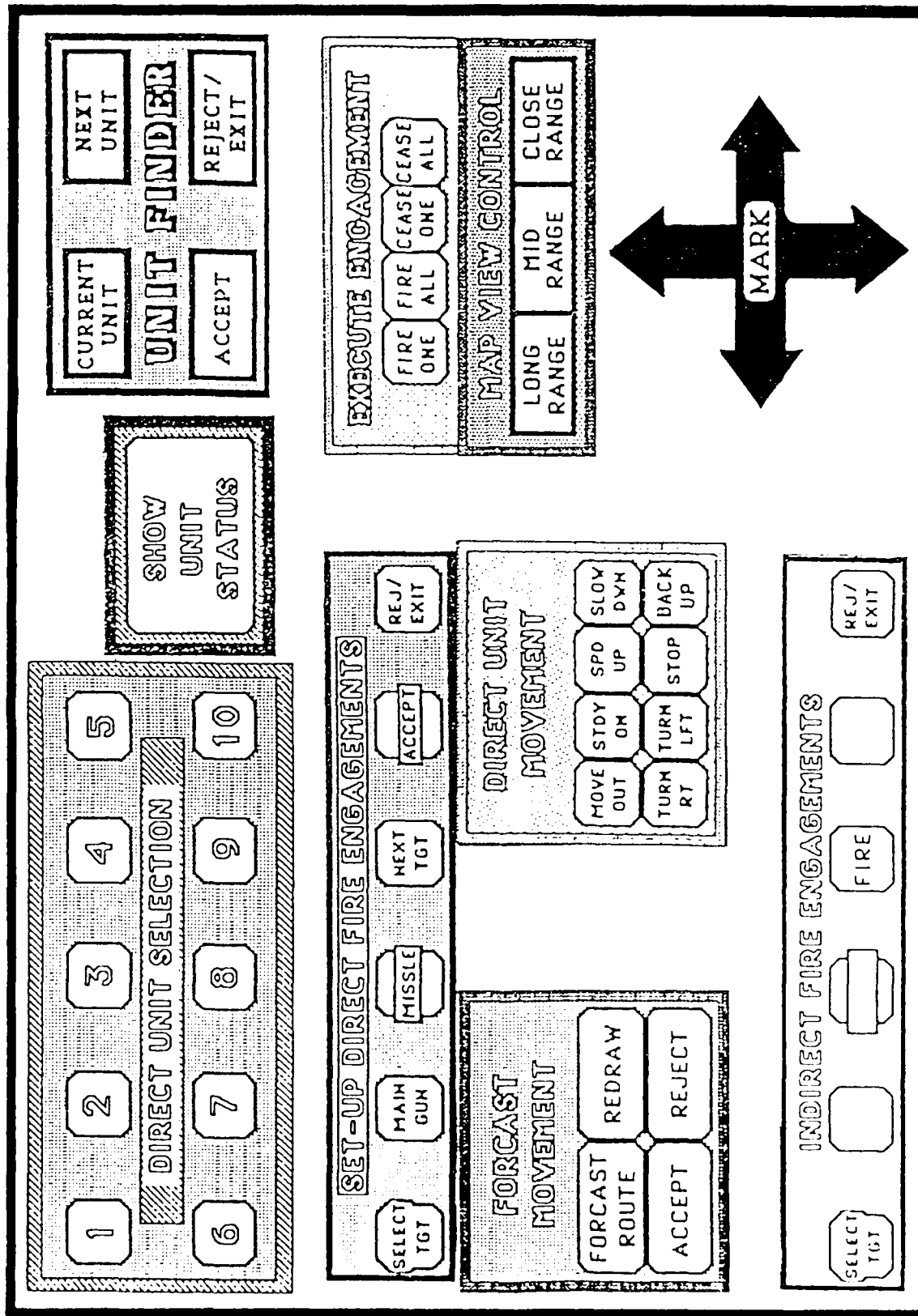


Figure B-2. OPFOR Control Panel.

APPENDIX C
TANK COMMANDER GUIDE

Don Lampton
ARI, Fort Knox, Kentucky

June 1987

Appendix C TANK COMMANDER GUIDE

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APPENDIX C

Tank Commander Guide

INTRODUCTION

SIMCAT is a computer-based battle simulation that allows practice of command, control and communication for platoon level missions. SIMCAT allows four participants to serve as TCs (Tank Commanders) of simulated M1 tanks. Each TC has a computer monitor display which indicates the location of his tank and any other vehicles which would be in line of sight with his tank. The location and orientation of each vehicle, and gun tube orientation, is shown by a computer-generated vehicle symbol which is drawn at the appropriate location on a map display.

At each TC station a SC (SIMCAT Station Controller) represents the rest of the tank crew, i.e., the loader, gunner and driver. To control the movements and firing of his tank the TC issues commands aloud as he would do in an actual tank. For example, the TC announces "Driver, Move Out!" and the SC would then press the appropriate control to start vehicle movement. After a brief delay the vehicle symbol on the screen would begin moving across the map display. The TC issues commands such as "Speed Up," "Steady On," "Guide Left" and "Stay on this trail" to control the direction and rate of vehicle movement. The SC uses a touch sensitive panel to input the TC's commands.

The TC issues fire commands to control vehicle firing. For example, the TC commands "GUNNER SABOT LEFT TANK" and the SC presses the appropriate controls to execute that fire command. SIMCAT is not a gunnery trainer. Gunnery is represented only to the extent necessary to allow the TC to practice that C³ aspects of main gun engagement. That is, SIMCAT allows the TC to decide which target to engage, issue a fire command, and observe and report the engagement outcome.

Each station has a CVC helmet with an attached communications box. Platoon and Company communication nets allow practice of standard CEOI procedures. Because the stations are separated by partitions the TCs must use the commo nets to contact each other. TCs operate only the CVC switch and the commo box, they are never required to operate the SIMCAT station controls.

Each tank in the platoon is independently controlled by an individual TC. The platoon leader and platoon sergeant are therefore required to use the communication nets, hand and arm signals, and the wingman concept to ensure that the four tanks operate as sections and as a platoon.

COMMUNICATIONS

To talk on the platoon net hold your CVC helmet switch in the forward position. To talk to your "crew", the SC, leave the switch in the center position, never lock the switch back.

At the platoon leader and platoon sergeant stations a special speaker monitors the Company net. To speak on the Company net the platoon leader, or platoon sergeant, must shift to Channel C on the commo box.

Map View

Terrain is represented by photographs of a 1:24,000 scale map. Three levels of terrain display are available.

Close Range: 600m x 450m

Mid Range: 3000m x 2250m

Long Range: 6600 x 4950m

The tank symbols are to approximate scale for the close range. The tank with the green turret is the one under your control. Close range is useful for viewing platoon formations and detailed terrain observation. It is also easier to drive with the close range. Unfortunately, operation at close range leaves the tank vulnerable to engagement from OPFOR vehicles which are within easy engagement range but lie "off" the close range screen. During tactical operations the mid or long range views should be used for most of the time. For these ranges tighter formations will result in the tank symbols slightly overlapping each other. This is acceptable.

Movement

When moving, your tank will appear to cross the map display. As the tank approaches the "edge" of the screen the picture will briefly blackout. A new map picture will be shown and your tank will appear at the center of the screen.

Maximum speed is determined by the type of terrain which you are crossing. Current speed, in kilometers per hour, is shown in a green box at the lower right of the display screen.

MAX SPEED

TERRAIN	FORWARD	REVERSE
Primary Road:	70 KPH	25 KPH
Secondary Road:	55 KPH	25 KPH
Cross-Country:	35 KPH	25 KPH
Trail:	25 KPH	25 KPH
Woods:	15 KPH	15 KPH
Water:	3 KPH	3 KPH

When a vehicle crosses from one terrain type into a different type of terrain the computer system will automatically decrease vehicle speed, if necessary. For example, if you are going 40 KPH on a primary road (for which the maximum speed is 70) and you leave the road to go cross-country the speed would be automatically reduced to 35 KPH (the maximum speed for cross-country terrain). However, if you go from cross-country onto a road you will not

automatically speed up. You would have to tell your driver to increase speed. If your speed drops to 3 KPH this indicates that you have come too close to water, such as a pond or stream. Wait until you have cleared the water then increase speed.

As you drive up and down hills and through wooded areas other vehicles will pop in and out of sight. Remember that the screen will only display those vehicles that you could see if you were on the ground at the spot of your vehicle symbol. You can not see other vehicles which are on the other side of a hill from you and you can not see very far into heavy woods. Use the map contour lines to estimate your actual field of view.

Direct Fire Engagement

Due to uncontrollable computer delays it may take up to 20 seconds to get off the first round against a target. This will seem like a very long time during the simulated combat. The Chief Controller is aware of this delay and will take this into account in evaluating your performance. For purposes of the SIMCAT exercises assume that you are operating under a degraded gunnery mode which slows firing.

Upon deciding to engage a target you should issue a doctrinally correct fire command. The gunner will then slew the gun tube towards the target. You will then hear the system speaker announce "AMMO UP" and then "IDENTIFIED" as the final lay is completed. You should then command "FIRE." The system speaker will announce "ON THE WAY" and a firing signature will appear at the end of the gun tube. Observing a burst on target does not necessarily indicate that the target has suffered a direct hit or any damage. If the target is damaged so that it has lost both movement and firepower it will turn into a 'junk pile', a black twisted shape. The gunner will continue to engage a target until it is destroyed or you command "ceasefire."

Only targets in view can be engaged. You can not recon by fire. Only main gun engagements can be conducted, assume that your coax and .50 cal are inoperative.

Status

Your tank may be damaged or destroyed by enemy direct and indirect fire. (Misplaced friendly fire can also produce damage.) After any engagement you should determine vehicle status. This will produce a message, lasting 3 seconds, which will appear on the screen and indicate what damage, if any, has occurred. The message "Movement Only" indicates that you have lost firepower. "Fire only" indicates that you can no longer move but can still fire. "Sit back and relax you are no longer with us" indicates that you have suffered a catastrophic kill. The status message will also indicate the type of terrain you are on. Tell the SC to "check status" when you wish to determine the status of your vehicle.

Hand and Arm Signals

When you wish to use hand and arm signals tell the SC to "Send a Signal." The computer symbol representing your tank will be replaced by a different computer symbol. At the same time you should actually give the hand and arm signal to the Chief Controller.

Practice C³

During the SIMCAT exercises you will do many things as you would during field exercises, for example, reporting enemy contact. You will also do a few things specific to SIMCAT that don't correspond to field activities, for example, selecting the map view range. Concentrate on exercising C³ principles as you would in the field. Do not be distracted by factors specific to SIMCAT. Remember that SIMCAT system delays make driving and gunnery difficult. Assume that your 'crew' is operating under adverse conditions, such as fatigue from extended operations.

APPENDIX D
SIMCAT STATION CONTROLLER GUIDE

Don Lampton
ARI, Fort Knox, Kentucky

June 1987

Appendix D SIMCAT STATION CONTROLLER GUIDE

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APPENDIX D

SIMCAT Station Controller Guide

INTRODUCTION

SIMCAT is a computer based battle simulation that allows practice of command, control and communication for platoon level missions. SIMCAT allows four participants to serve as Tank Commanders (TCs) of simulated M1 tanks. Each TC has a computer monitor display which indicates the location of his tank and any other vehicles which would be in line of sight with his tank. The location and orientation of each vehicle, and gun tube orientation, is shown by a computer-generated vehicle symbol which is drawn at the appropriate location on a map display.

At each TC station a SIMCAT Station Controller (SC) represents the rest of the tank crew, i.e., the loader, gunner and driver. To control the movements and firing of his tank the TC issues commands aloud as he would do in an actual tank. For example, the TC announces "Driver, Move Out!" and the SC would then press the appropriate control to start vehicle movement. The SC uses a touch sensitive panel to input the TC's commands. After a brief delay the vehicle symbol on the screen would begin moving across the map display.

The TC issues commands such as "Speed UP," "Steady ON," "Guide Left" and "Stay on this trail" to control the direction and rate of vehicle movement. The TC issues fire commands to control vehicle firing. For example, the TC commands "GUNNER SABOT LEFT TANK" and the SC presses the appropriate controls to execute that fire command. SIMCAT is not a gunnery trainer. Gunnery is represented only to the extent necessary to allow the TC to practice that C³ aspects of main gun engagement. That is, SIMCAT allows the TC to decide which target to engage, issue a fire command, and observe and report the engagement outcome.

Each station has a CVC helmet with an attached communications box. Platoon and Company communication nets allow practice of standard CEOI procedures. Because the stations are separated by partitions the TCs must use the comms nets to contact each other. TCs operate only the CVC switch and the comms box, they are never required to operate the SIMCAT station controls.

Each tank in the platoon is independently controlled by an individual TC. The platoon leader and platoon sergeant are therefore required to use the communication nets, hand and arm signals, and the wingman concept to ensure that the four tanks operate as sections and as a platoon.

Station Description

The color monitor, (#1) in Figure D-1, displays the battlefield. All commands to the computer are given using the touch pad control panel (#2). The SC sits directly in front of the touch pad. The TC sits in front of the communications box (#3).

Control Panel Operation

The control panel (See Figure D-2) allows you to send commands to the computer without requiring you to type commands on a keyboard. In the instructions that follow, commands that should be entered with the control panel are shown in bold type. To send a command, lightly roll the tip of your finger over the area within a command box. For example roll your finger over the **STOP** command box which is found in the lower left of the control panel. You should hear a faint click sound come from the computer when you properly press a command box. Little pressure is needed to activate the command boxes. Pressing too hard will damage the control panel. Occasionally you may hear a double click. This is undesirable. Practice pressing the **STOP** command so that you can determine the least amount of pressure needed to reliably produce a 'click'. To use the turret control, in the upper right corner of the control panel, press the "arrow head" of the arrow you wish to select.

Map View Control

The map view controls are at the center of the control panel. After you select a new range it may take several seconds for the computer to display the new view.

Close Range: 600m x 450m

Mid Range: 3000m x 2250m

Long Range: 6600 x 4950m

The tank symbols are to approximate scale for the close range. Close range is useful for viewing platoon formations and detailed terrain observation. It is also easier to drive with the close range. Unfortunately, operation at close range leaves the tank vulnerable to engagement from OPFOR vehicles which are within easy engagement range but lie 'off' the close range screen. During tactical operations the mid or long range views should be used for most of the time. For these ranges close formations will result in the tank symbols slightly overlapping each other. This is acceptable.

Movement

Your tank will always be shown with a green turret. When moving, your tank will appear to cross the map display. As the tank approaches the "edge" of the screen the picture will briefly blackout. A new map picture will then be shown and your tank will appear at the center of the screen.

Maximum speed is determined by the type of terrain which you are crossing. Current speed is shown in a green box at the lower right of the display screen.

MAX SPEED

TERRAIN	FORWARD	REVERSE
Primary Road:	70 KPH	25 KPH
Secondary Road:	55 KPH	25 KPH
Cross-Country:	35 KPH	25 KPH
Trail:	25 KPH	25 KPH
Woods:	15 KPH	15 KPH
Water:	3 KPH	3 KPH

The movement commands are in the lower left of the control panel.

These commands only have effects if the tank is NOT moving

MOVE OUT - Accelerate to maximum terrain speed
EASE OUT - Accelerate to 5 KPH in a forward direction
PIVOT RIGHT - Turn 90 degrees to the right
PIVOT LEFT - Turn 90 degrees to the left
BACK UP - Accelerate to the maximum speed of the terrain in reverse

These commands only have effects if the tank is moving

STOP - Decelerate to 0 KPH
SLOW DOWN - Decelerate to 5 KPH
SPEED UP - Increase speed by 5 KPH
STEADY ON - Stop turns and acceleration and/or deceleration
GUIDE RIGHT - Turn 15 degrees to the right
GUIDE LEFT - Turn 15 degrees to the left
HARD RIGHT - Turn 90 degrees to the right
HARD LEFT - Turn 90 degrees to the left
TURN RIGHT - Continually turn to the right
TURN LEFT - Continually turn to the left

These commands can be given whether the tank is moving or not

DASH - Accelerate to maximum terrain speed
EVADE RIGHT - Zigzag towards the right (SAGGER dance)
EVADE LEFT - Zigzag towards the left (SAGGER dance)

When a vehicle crosses from one terrain type into a different type of terrain the computer system will automatically decrease vehicle speed if necessary. For example, if you are going 40 KPH on a primary road (for which the maximum speed is 70) and you leave the road to go cross-country the speed would be automatically reduced to 35 KPH (the maximum speed for cross-country terrain). However, if you go from cross-country onto a road you will not

automatically speed up. You would have to use the command **SPEED UP** to increase your speed. If your speed drops to 3 KPH this indicates that you have come too close to water, such as a pond or stream. Wait until you have cleared the water then hit **SPEED UP**.

As you drive up and down hills and through wooded areas other vehicles will pop in and out of sight. Remember that the screen will only display those vehicles that you could see if you were on the ground at the spot of your vehicle symbol. You can not see other vehicles which are on the other side of hills from you and you can not see very far into heavy woods. Use the map contour lines to estimate your actual field of view.

Control of tank movement is difficult because you must look away from the terrain display screen in order to look at the control panel. Also, there is a delay between the time that you press the control panel and the time that the system responds.

Use the **GUIDE RIGHT** (or **GUIDE LEFT**) or **HARD RIGHT** (or **HARD LEFT**) commands to perform turns. The **TURN RIGHT** command requires you to precisely time the **STEADY ON** command to stop the turn so that you are headed in the desired direction.

Turret Orientation Control

Turret orientation, the direction that the main gun tube is pointing, is controlled independently from vehicle hull orientation. The turret control, which is in the upper right corner of the Control Panel, has eight directional arrows. These arrows move the turret in relation to the monitor screen, not the vehicle hull. For example, pressing the arrow labeled "1" will always cause the gun tube to point towards the top of the screen, pressing "7" will cause the gun tube to point to the left of the screen. Pressing the center area (labeled "0") will cause a line to be temporarily drawn from the gun tube to the edge of the screen.* This line is to help the gunner more accurately judge the direction of the gun tube. The commands "**TURN LEFT**" and "**TURN RIGHT**" located under the turret control arrows, can be used to make finer adjustments to turret orientation. **TURN LEFT** moves the turret 5 degrees counterclockwise, in relation to the screen, and **TURN RIGHT** moves the turret 5 degrees clockwise.

* These arrows are numbered in Figure D-2 for these examples. The actual SIMCAT control panel is not numbered.

Gunnery

The controls needed for gunnery engagements are at the right side of the control panel. Three steps must be completed before a round can be fired.

1) Gun Tube Orientation. The gun tube must be pointed to within 20° of the intended target. Occasionally a target may come into view so that it is already within this 20° angle. For example, if the gun tube is over the front deck and a target appears to your direct front then you would not need to make any adjustment to turret orientation. Usually, however, you will have to use the turret orientation control to obtain the required orientation.

Press the arrowhead which will bring the gun tube aim closest to the target, then use the small turret turns, **TURN LEFT** or **TURN RIGHT**, only if necessary. Remember that you only need to be within 20° of the target, do not waste time trying for a perfect aim. You must wait until the turret has stopped slewing before you go on to the next step.

2) Target Selection. After the turret has stopped slewing you should press either **TANK** or **PC** according to the TC's fire command. The computer system will then simulate the action of the loader and the gunner. From the station speaker you will hear the loader say "Ammo Up". The turret will automatically slew so that the gun tube is right on target and you will hear "Identified". Several seconds may elapse between the time you select the target type, Tank or PC, and when you finally hear "Identified."

3) Fire. After you hear "Identified" you should wait for the TC to command "Fire" before you press the **Fire** command.

Reengage. The system will then continue to automatically engage the target until:

1. the target is destroyed (turns into "junk")
2. 3 rounds are fired
3. line of sight is lost
- or 4. you press **CEASEFIRE**

"Cannot Identify". If, after the loader says "Ammo Up" the system announces "Cannot Identify" then no round will be fired. There are several factors which can cause this problem. If line of sight is lost with the target, even temporarily, before a round is fired then the entire firing sequence must be repeated. If the target type is misidentified, that is if **TANK** is selected when only PCs are within 20° of the gun tube, then you will hear "Cannot Identify".

Fratricide. It is possible to engage and destroy friendly tanks.

Other Factors. If more than one of the selected target type are within the 20° angle then the target closest to the aiming line will be engaged. Dead vehicles, "junk piles", cannot be targeted.

Status

The **SHOW TANK STATUS** command is at the left center of the control panel. Your tank may be damaged or destroyed by enemy direct and indirect fire. (Misplaced friendly fire can also produce damage.) After any engagement you should determine vehicle status. This will produce a message, lasting 3 seconds, which will appear on the screen and indicate what damage, if any, has occurred. The message "Movement Only" indicates that you have lost fire-power. "Fire only" indicates that you can no longer move but can still fire. "Sit Back and relax you are no longer with us" indicates that you have suffered a catastrophic kill. The status message will also indicate the type of terrain you are on. The terrain type will be listed as "barrier" if you pass too close to water.

Hand and Arm Signals

The hand and arm signal commands are at the top left of the control panel. When the TC says "send a signal" you should hit any one of these. You are not expected to be able to tell which specific hand and arm signal each command block represents.

Communication

The TC is entirely responsible for operating the commo box.

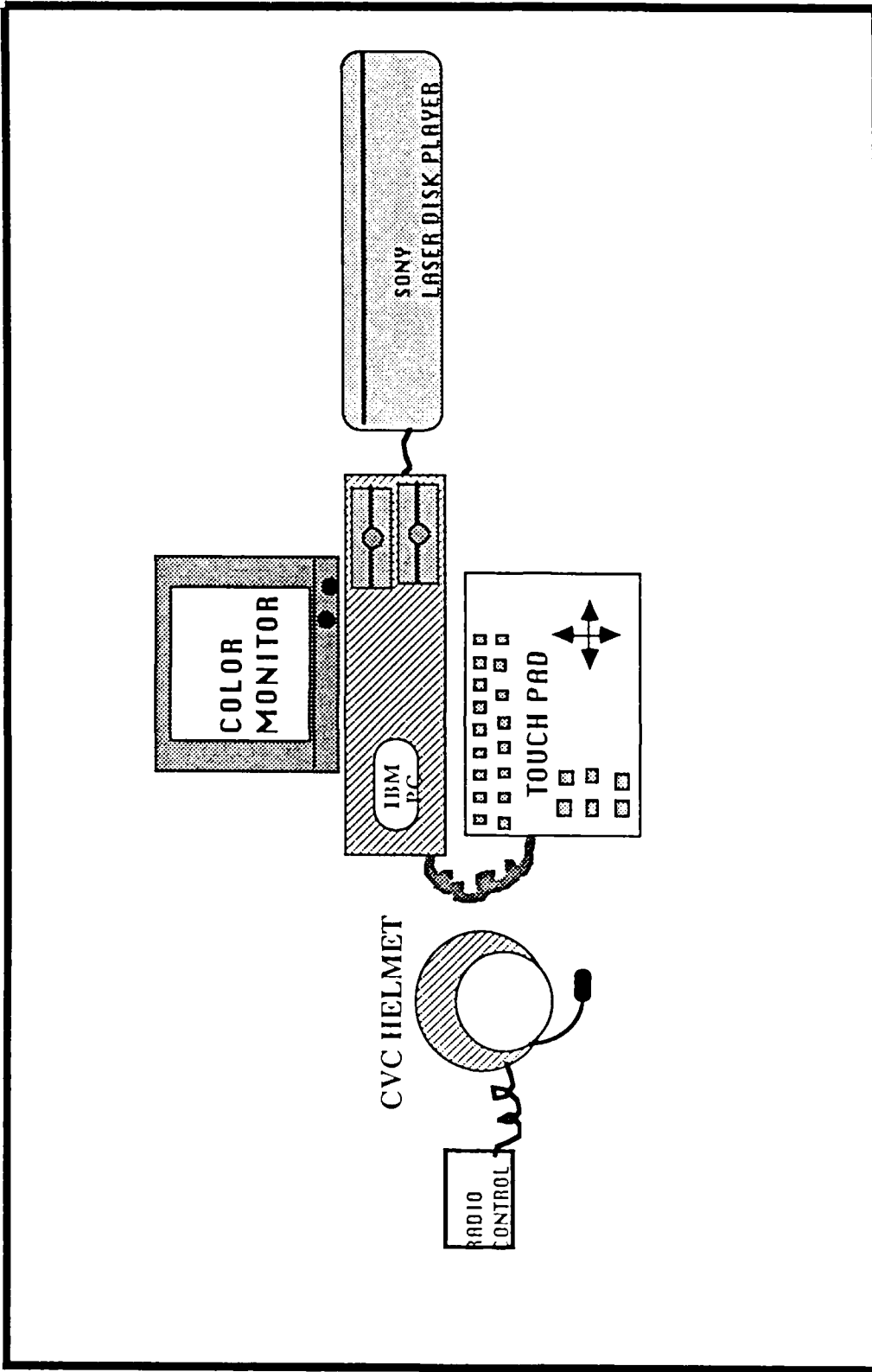


Figure D-1. Player Station.

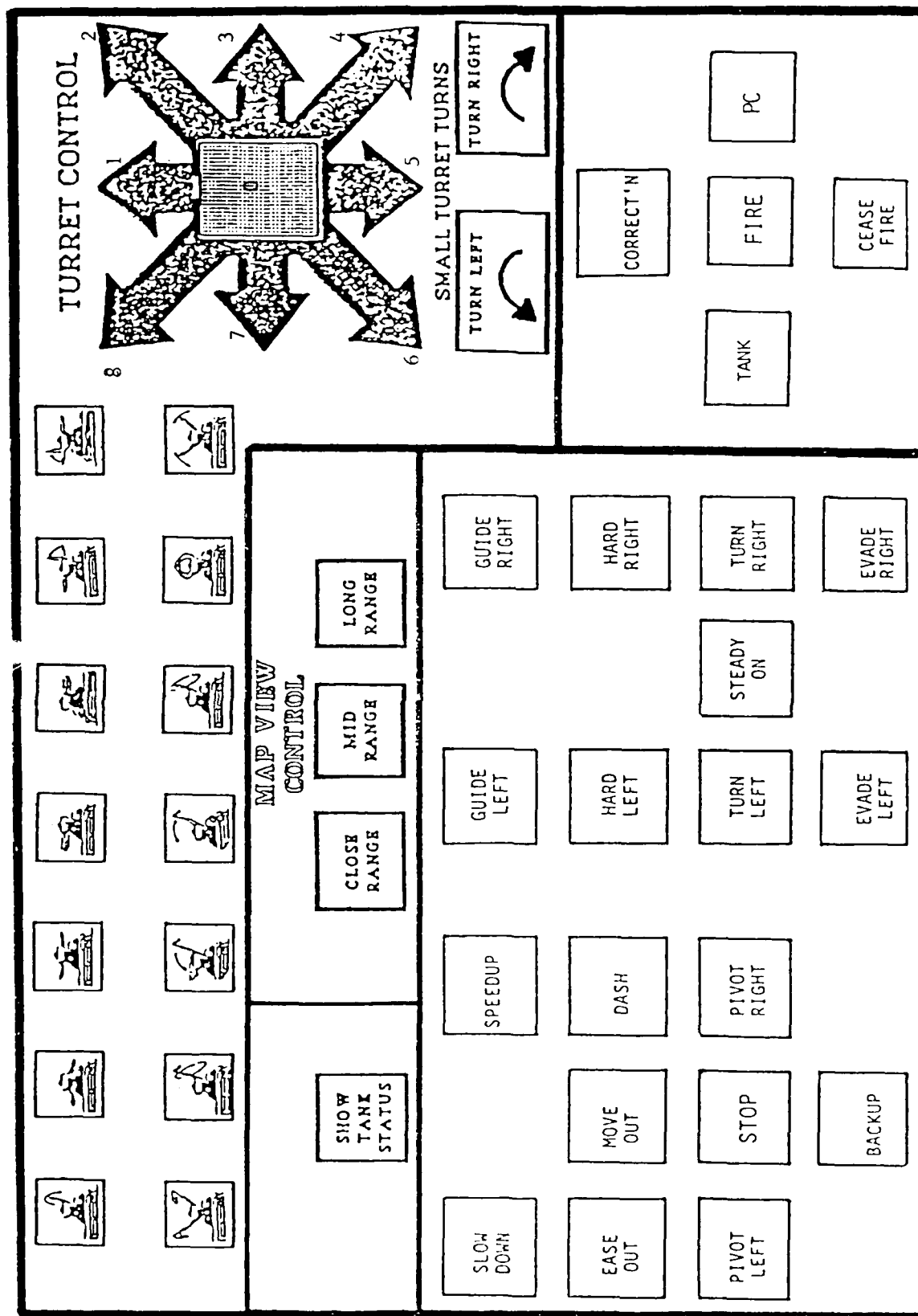


Figure D-2. Control Panel.

APPENDIX E
SIMCAT SYSTEM OPERATING INSTRUCTIONS

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ARI, Fort Knox, Kentucky

June 1987

Appendix E SIMCAT SYSTEM OPERATING INSTRUCTIONS

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Figure E-1. SIMCAT Configuration.	E-5

APPENDIX E

SIMCAT OPERATING INSTRUCTIONS

System Start-Up (See Figure E-1)

1. Turn on the surge protector and backup power supplies located under the Fileserver Station. Press the reset button on each of the power supplies to stop the beeping signal.
2. Confirm that the disks labeled "Quick Start" are inserted into the (A) drives of the Controller and Fileserver stations.
3. Turn on the computers at the Controller and Fileserver stations, then turn on the Hard Disk.
4. Turn on the Color monitor and Videodisc Player at the Controller station.
5. At each of the player stations and the OPFOR station turn on the color monitor, laser disk player and then the computer.
6. Watch on the monochrome monitor of the Controller station for the message "Enter New Time:", type in the time using the 24-hour system. Example, if the time is 1:30pm enter 13:30.
7. The message "Enter New Date:" will appear, type the month, day and year (in that order). Example, if the date is the 15th of August 1987 enter 8-15-87.
8. Wait 1-1/2 to 2 minutes for the flashing SIMCAT logo to appear on the Controller color monitor, then hit any key to continue the start procedure.
9. Wait 1 minute for the message "Controller Initialization Complete press any Key to Continue" to appear on the Controller monochrome monitor, then press any key.
10. When the Controller Master Menu appears on the monochrome monitor, type the letter "T" to conduct the system test. The complete test will take about 2-1/2 to 3 minutes.
11. When the test is finished the message "Station Configuration Test Complete" will appear. Press any key to return to the Controller Master Menu.
12. From the Controller Master Menu you may choose to run scenarios from the Tank Tables or SIMCAT scenarios. For the Tank Tables choose the "T" option. For the SIMCAT scenarios choose the "S" option.
13. If you type "S" the SIMCAT Scenario Menu will appear.

14. Press "1" to bring up the Initial Conditions Menu. The initial conditions are stored on one of six subdirectories. Enter a letter, A thru F, to select the appropriate subdirectory. Each of the SIMCAT scenarios in appendixes F-M are labelled with a subdirectory letter (A-F) and a file number (1-5).

15. The next menu to appear will list the five files within the subdirectory. Choose the scenario you need by pressing the appropriate number. The system will now bring up the chosen scenario.

System Shut-Down

From the keyboard at the Chief Controller station perform the following steps before turning off any equipment.

1. Repeatedly press the **ESC** key until the message "CTRL + ENTER to Stop Current Initial Conditions" appears.

2. Simultaneously press the **CTRL** and the **ENTER** key.

3. Type **r** to return to the Controller Master Menu.

4. Type **Q** to quit, that is, to exit the SIMCAT system.

Turn off the following components in the order indicated.

1. Turn OFF the hard disk drive and the computer (in that order) at the file server station.

2. Turn OFF the computer, videodisc player, and color monitor (in any order) at the following stations: TC1, TC2, PL, PS, and OPFOR (in any order).

3. Turn OFF the computer, color monitor, and videodisc player (in that order) at the Controller station.

4. Turn OFF the communications power supply.

5. Turn OFF the back-up power supplies and the surge protectors (in that order).

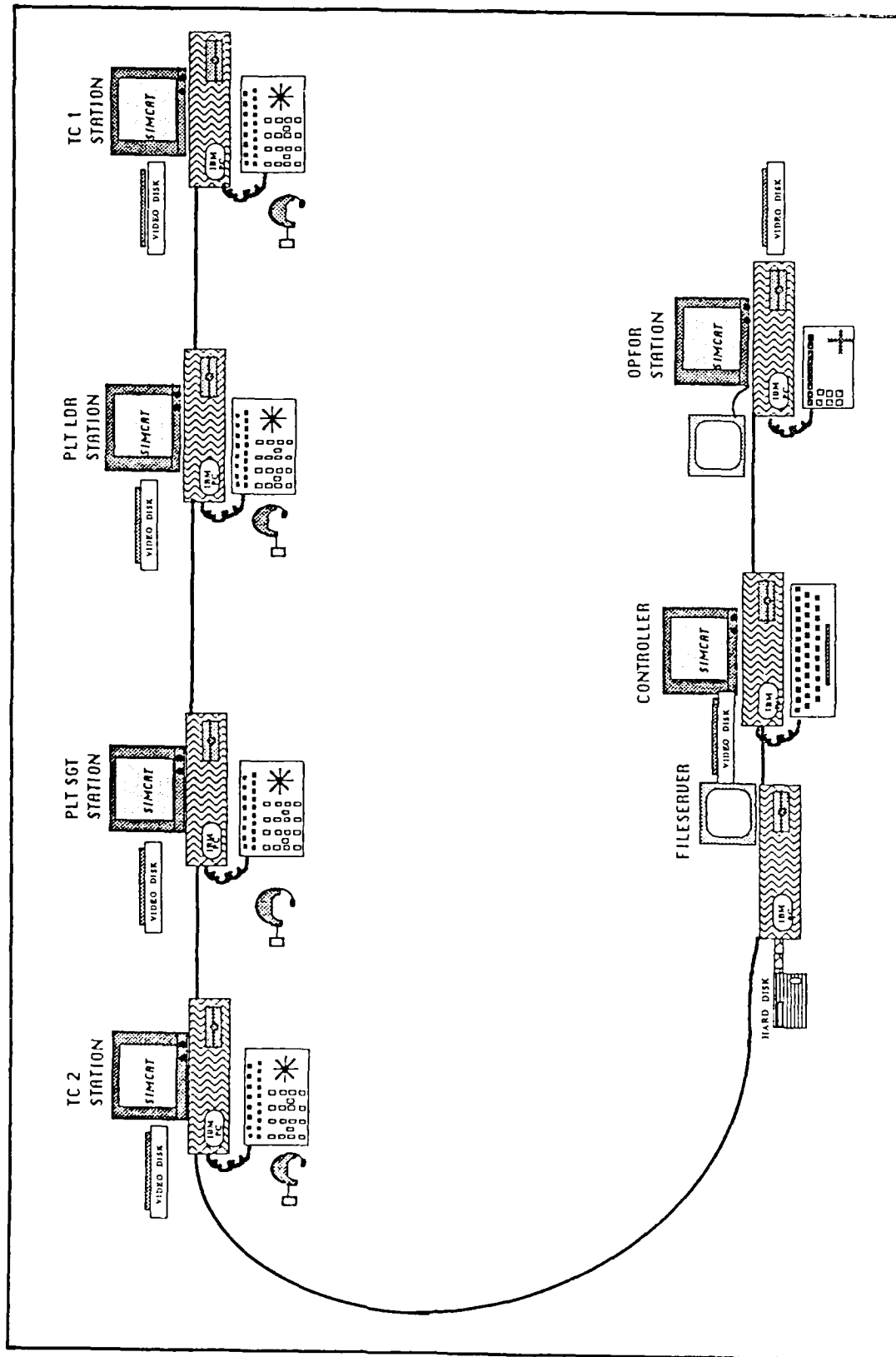


Figure E-1. SIMCAT Configuration.

APPENDIX F

TACTICAL ROADMARCH #1

APPENDIX F TACTICAL ROADMARCH #1

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Appendix F

TACTICAL ROADMARCH #1

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

- a. Review STX A in FC 17-15-1 and standards for prerequisite tasks listed in Paragraph 3.
- b. Review FC 17-15 for further explanation of tasks as needed.
- c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX A and platoon tasks.
- d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.
- e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Tactical Road March exercises:

(1) Planning combat operations.

(2) Providing command control of a unit. The following tasks from FM 17-19E4 will be learned or reinforced:

071-326-3049 Conduct Troop-Leading Procedures for an Operation
071-326-5502 Issue a Fragmentary Order

c. Main teaching points:

(1) Tactical Planning. Request clarification of your orders and additional guidance if needed for planning. Get information on location of friendly units. Backward plan to hit your SP and RP on time. Anticipate danger points in movement and fire planning.

(2) Reconnaissance. Conduct map reconnaissance. Find terrain features useful in reacting to potential threats.

(3) Troop Leading. Use warning order (WO) to ensure platoon completes timely preparations. Ensure platoon sergeant and tank commanders copy overlay, TRPs, and CEOI correctly. Delegate some duties to platoon sergeant. Emphasize any unusual or nonroutine aspects of mission and plan.

(4) Prepare and Initiate Movement. Start engines together. If vehicles are dispersed in AA, designate a rally point to assemble in march order.

(5) All-round Security. Maintain security throughout movement. Continuously analyze the situation, anticipating possible dangers and possible lapses of vigilance. Exert command and control to prevent surprise. Use formations to maintain mutual support. Plan and request deviations along route to minimize duration and extent of exposure.

(6) Unscheduled Halts. Establish security, report, and take initiative within constraints of orders to overcome the problem.

(7) React to Indirect Fire. Evade the impact area, using irregular movement and/or exhaust smoke to hinder adjustment. Assume MOPP-4, monitor NBC conditions, and request return to lower MOPP level when negative. Establish coordinated movement and all-around security as soon as possible.

(8) Actions on Contact (SAGGER). Use brevity codes, cardinal directions, and drill commands to obtain an immediate response by the platoon. Pop smoke, take cover or move evasively (SAGGER dance), and distribute return fire around the launch point. Continue to move concealed by exhaust smoke. Call suppressive fire after platoon reacts. Conserve ammunition by limiting fire to visible targets or during flight of the missile. Keep the location under observation at least until indirect fire arrives. Maintain observation of other potential threat locations at the same time.

(9) Tactical Road March (General). A tactical road march is not an administrative march. Assume possible contact unless orders indicate otherwise. Clarify rules of engagement; travel with weapons hold, tight, or free. Plan suppressive fires and smoke missions to aid secure movement.

(10) Reconnoiter an Obstacle. Warn the platoon of obstacle and likely contact. Deploy in secure positions and report location and extent of obstacle. Recon by fire, then approach for visual recon with overwatching elements. Check for approach routes, mined areas, breach or bypass points, and complete report. Maintain all-round security when moving to bypass, expect rear engagement, and use exhaust smoke if appropriate.

(11) Move in Column Formation. Check intervals and all-round security as you move. Assign areas of observation to particular tanks when deviation from the SOP is needed.

(12) Actions on Contact. When enemy direct antitank fire is encountered, a platoon should execute the following five steps: (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs battle drill (action drill or contact drill). If platoon leader does not

direct a drill the platoon seeks cover and concealment. (3) Send contact report to the company commander; (4) Develop situation through fire and movement to fix or destroy the enemy; (5) Send spot report to the company commander.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes

ARTEP TASK	TASK/SUBTASK	
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
f. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active counter-measures if necessary to suppress suspected OPFOR positions	Partial
g. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
h. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guards	No

ARTEP TASK	TASK/SUBTASK	
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
i. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes
j. 5-III-2-12-1	Reconnoiter an obstacle	
	01. Encounter an obstacle	Partial
	02. Perform the following action (platoon leader)	Yes
	a. Record all data on a map overlay	
	b. Report all data to company/team commander	
k. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition and report contact to company commander immediately	Yes
	03. Initiate actions	Partial
l. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
m. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial
	a. Establish communications with platoon elements and higher headquarters	

ARTEP TASK	TASK/SUBTASK
------------	--------------

- b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously
- c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown

4. TRAINING AND EVALUATION SCHEDULE

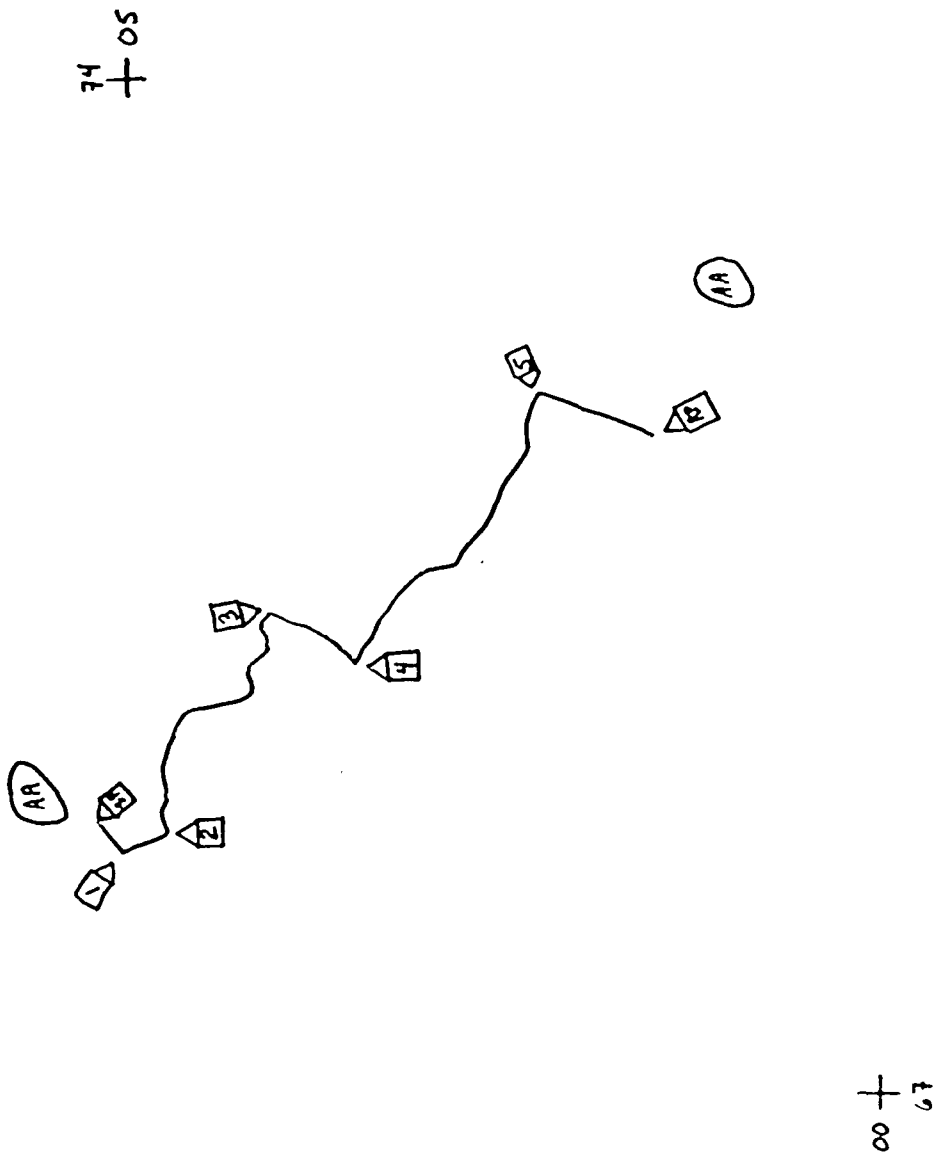
<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of FRAGO	H-30	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues FRAGO, CEOI, map w/overlay to PLT LDR
b. Plt Ldr performs tactical planning/recon	H-25	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	
c. Plt Ldr issues OPORD	H-10	Tng Facility	5-III-2-3-2	Instructor evaluates order for accuracy and completeness. Tape record if desired
d. Platoon stand-to activities/prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
e. Platoon departs, establishes all-round movement security	H-2	ES691057 (All grids are on SIMCAT)	5-III-2-5-2 5-III-2-5-6 5-III-2-5-7	Instructor checks interval, gun tube orientation, and speed
f. Cross SP/Perform tactical road march	H	ES690053	5-III-2-5-6	Instructor checks time, speed and interval at SP
g. React to indirect fire	H+	ES691029	5-III-2-12-10	Instructor will bring indirect fire in the vicinity of ES691029
h. Execute actions on contact	H+	ES695048	5-III-2-12-2 5-III-2-5-5	Instructor engages platoon from ES691042 (BMP) or ES702047 (T72) when platoon reaches vicinity ES695048

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
i. Encounter an obstacle	H+	ES701035	5-III-2-5-6 5-III-2-12-1 5-III-2-5-1 5-III-2-5-5	Instructor gives lead vehicle a card stating "Obstacle and the immediate area around appears impassable." OPFOR can engage from vicinity ES691042 (BMP) or ES702047 (T72) and/or bring in indirect if PLT LDR does not take appropriate action
j. Actions on contact	H+	ES704016	5-III-2-12-12 5-III-2-5-5	Instructor engages platoon from ES708018 (T72) or ES697009 (BMP) when platoon reaches vicinity of ES704016
k. Crosses RP	H+	ES715015	5-III-2-5-6	Instructor checks movement through RP and into AA without movement stoppage
l. Platoon moves into AA	H+	ES725009	5-III-2-1-1	Instructor checks on movement into AA, establishment of security, and preparation for continued operation

5. SITUATION. The following situation and FRAGO can be used to initiate this scenario.

Your unit is in a rear assembly area. Your platoon is at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The enemy has been attacking but the units to the front have repulsed initial attacks. There may be combat reconnaissance patrols and patrols from the advanced party that have penetrated our forward units and are in the area. No enemy force stronger than platoon-size is expected to be in the rear area.

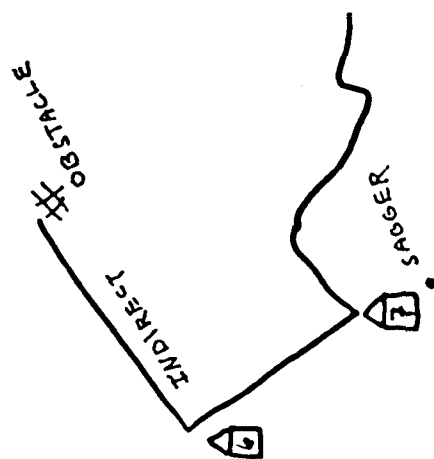
"ALERT! CO/TM _____ MOVES AT (_____) HOURS TO DESIGNATED PLATOON
ASSEMBLY AREAS VICINITY COORDINATES (_____), CLOSING ASSEMBLY AREAS NLT
(_____), (your platoon) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
(sister platoon -- simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
_____ PLATOON (simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES
(_____). PLATOON LEADERS REPORT WHEN READY TO MOVE."



F-11

Figure F-1. Mission Overlay for Tactical Roadmarch #1

74 + 05



00 + 67

Figure F-2. Controller/OPFOR Overlay for Tactical Roadmarch #1

6. SIMCAT FILE NAME: TRM1.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Tactical Roadmarch #1 exercise, select initial condition set **A**, file number 1, during system start-up.

APPENDIX G
TACTICAL ROADMARCH #2

APPENDIX G TACTICAL ROADMARCH #2

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G-2. Controller/OPFOR Overlay for Tactical Roadmarch #2	G-12

Appendix G

TACTICAL ROADMARCH #2

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

- a. Review STX A in FC 17-15-1 and standards for prerequisite tasks listed in Paragraph 3.
- b. Review FC 17-15 for further explanation of tasks as needed.
- c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX A and platoon tasks.
- d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.
- e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Tactical Road March exercises:

(1) Planning combat operations.

(2) Providing command control of a unit. The following tasks from FM 17-19E4 will be learned or reinforced:

071-326-3049 Conduct Troop-Leading Procedures for an Operation
071-326-5502 Issue a Fragmentary Order

c. Main teaching points:

(1) Tactical Planning. Request clarification of your orders and additional guidance if needed for planning. Get information on location of friendly units. Backward plan to hit your SP and RP on time. Anticipate danger points in movement and fire planning.

(2) Reconnaissance. Conduct map reconnaissance. Find terrain features useful in reacting to potential threats.

(3) Troop Leading. Use warning order (WO) to ensure platoon completes timely preparations. Ensure platoon sergeant and tank commanders copy overlay, TRPs, and CEOI correctly. Delegate some duties to platoon sergeant. Emphasize any unusual or nonroutine aspects of mission and plan.

(4) Prepare and Initiate Movement. Start engines together. If vehicles are dispersed in AA, designate a rally point to assemble in march order.

(5) All-round Security. Maintain security throughout movement. Continuously analyze the situation, anticipating possible dangers and possible lapses of vigilance. Exert command and control to prevent surprise. Use formations to maintain mutual support. Plan and request deviations along route to minimize duration and extent of exposure.

(6) Unscheduled Halts. Establish security, report, and take initiative within constraints of orders to overcome the problem.

(7) React to Indirect Fire. Evade the impact area, using irregular movement and/or exhaust smoke to hinder adjustment. Assume MOPP-4, monitor NBC conditions, and request return to lower MOPP level when negative. Establish coordinated movement and all-around security as soon as possible.

(8) Actions on Contact (SAGGER). Use brevity codes, cardinal directions, and drill commands to obtain an immediate response by the platoon. Pop smoke, take cover or move evasively (SAGGER dance), and distribute return fire around the launch point. Continue to move concealed by exhaust smoke. Call suppressive fire after platoon reacts. Conserve ammunition by limiting fire to visible targets or during flight of the missile. Keep the location under observation at least until indirect fire arrives. Maintain observation of other potential threat locations at the same time.

(9) Tactical Road March (General). A tactical road march is not an administrative march. Assume possible contact unless orders indicate otherwise. Clarify rules of engagement; travel with weapons hold, tight, or free. Plan suppressive fires and smoke missions to aid secure movement.

(10) Reconnoiter an Obstacle. Warn the platoon of obstacle and likely contact. Deploy in secure positions and report location and extent of obstacle. Recon by fire, then approach for visual recon with overwatching elements. Check for approach routes, mined areas, breach or bypass points, and complete report. Maintain all-round security when moving to bypass, expect rear engagement, and use exhaust smoke if appropriate.

(11) Move in Column Formation. Check intervals and all-round security as you move. Assign areas of observation to particular tanks when deviation from the SOP is needed.

(12) Actions on Contact. When enemy direct antitank fire is encountered, a platoon should execute the following five steps: (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs

battle drill (action drill or contact drill). If platoon leader does not direct a drill the platoon seeks cover and concealment. (3) Send contact report to the company commander; (4) Develop situation through fire and movement to fix or destroy the enemy; (5) Send spot report to the company commander.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes

ARTEP TASK	TASK/SUBTASK	
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
f. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active counter-measures if necessary to suppress suspected OPFOR positions	Partial
g. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
h. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	

ARTEP TASK	TASK/SUBTASK	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guards	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
i. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes
j. 5-III-2-12-1	Reconnoiter an obstacle	
	01. Encounter an obstacle	Partial
	02. Perform the following action (platoon leader)	Yes
	a. Record all data on a map overlay	
	b. Report all data to company/team commander	
k. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition and report contact to company commander immediately	Yes
	03. Initiate actions	Partial
l. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
m. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial

ARTEP TASK

TASK/SUBTASK

- a. Establish communications with platoon elements and higher headquarters
- b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously
- c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown

4. TRAINING AND EVALUATION SCHEDULE

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of FRAGO	H-30	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues FRAGO, CEOI, map w/overlay to PLT LDR
b. Plt Ldr performs tactical planning/recon	H-25	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	
c. Plt Ldr issues OPORD	H-10	Tng Facility	5-III-2-3-2	Instructor evaluates order for accuracy and completeness. Tape record if desired
d. Platoon stand-to activities/prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
e. Platoon departs, establishes all-round movement security	H-2	ES847946 (All grids are on SIMCAT)	5-III-2-5-2 5-III-2-5-6 5-III-2-5-7	Instructor checks interval, gun tube orientation, and speed
f. Cross SP/Perform tactical road march	H	ES844942	5-III-2-5-6	Instructor checks time, speed and interval at SP
g. Encounter an obstacle	H+	ES701035	5-III-2-5-6 5-III-2-12-1 5-III-2-5-1 5-III-2-5-5	Instructor gives lead vehicle a card stating "Obstacle and the immediate area around appear impassable." OPFOR

ARTEP TASK	TASK/SUBTASK
------------	--------------

can engage from
vicinity ES691042
(BMP) or ES702047
(T72) and/or bring
in indirect if PLT
LDR does not take
appropriate action

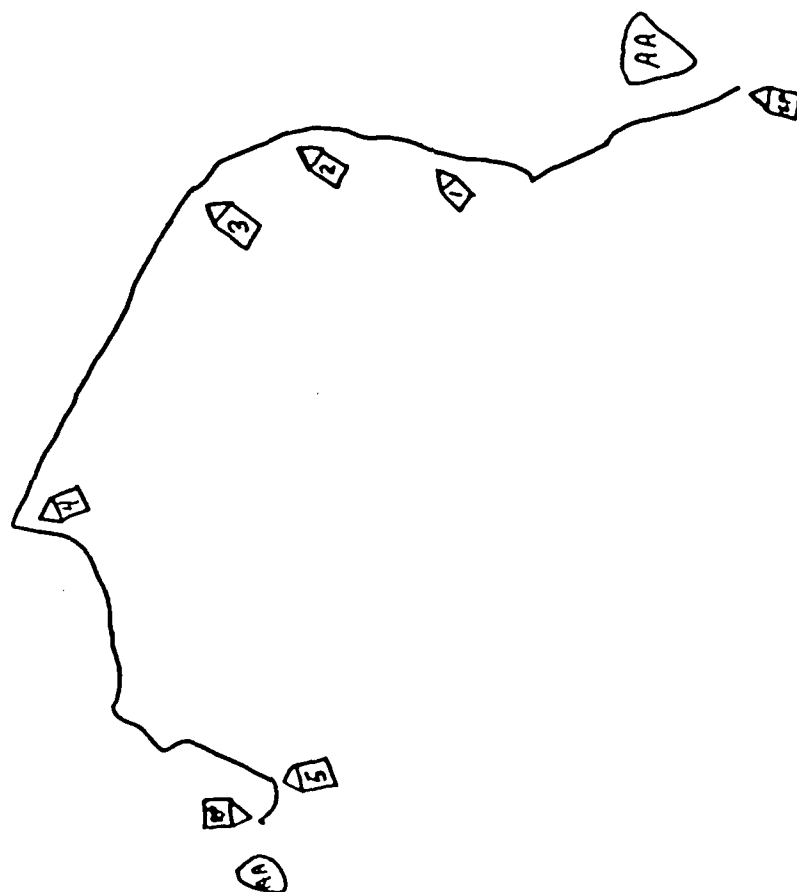
- | | | | | |
|---------------------------|----|----------|------------------------------|--|
| h. React to indirect fire | H+ | ES843982 | 5-III-2-12-10 | Instructor will bring indirect fire in the vicinity of ES843982 |
| i. Actions on contact | H+ | ES820996 | 5-III-2-12-12
5-III-2-5-5 | Instructor engages platoon from ES813993 (T72) or ES817000 (BMP) when platoon reaches vicinity of ES820996 |
| j. Actions on contact | H+ | ES801981 | 5-III-2-12-12
5-III-2-5-5 | Instructor engages platoon from ES803980 (T72) or ES799972 (BMP) when platoon reaches vicinity of ES801981 |
| k. Crosses RP | H+ | ES796978 | 5-III-2-5-6 | Instructor checks movement through RP and into AA without movement stoppage |
| l. Platoon moves into AA | H+ | ES792979 | 5-III-2-1-1 | Instructor checks on movement into AA, establishment of security, and preparation for continued operation |

5. SITUATION. The following situation and FRAGO can be used to initiate this scenario.

Your unit is in a rear assembly area. Your platoon is at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The enemy has been attacking but the units to the front have repulsed initial attacks. There may be combat reconnaissance patrols and patrols from the advanced party that have penetrated our forward units and are in the area. No enemy force stronger than platoon-size is expected to be in the rear area.

"ALERT! CO/TM _____ MOVES AT (_____) HOURS TO DESIGNATED PLATOON
ASSEMBLY AREAS VICINITY COORDINATES (_____), CLOSING ASSEMBLY AREAS NLT
(_____), (your platoon) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
(sister platoon -- simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
_____ PLATOON (simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES
(_____). PLATOON LEADERS REPORT WHEN READY TO MOVE."

86 + 00



95 + 78

Figure G-1. Mission Overlay for Tactical Roadmarch #2

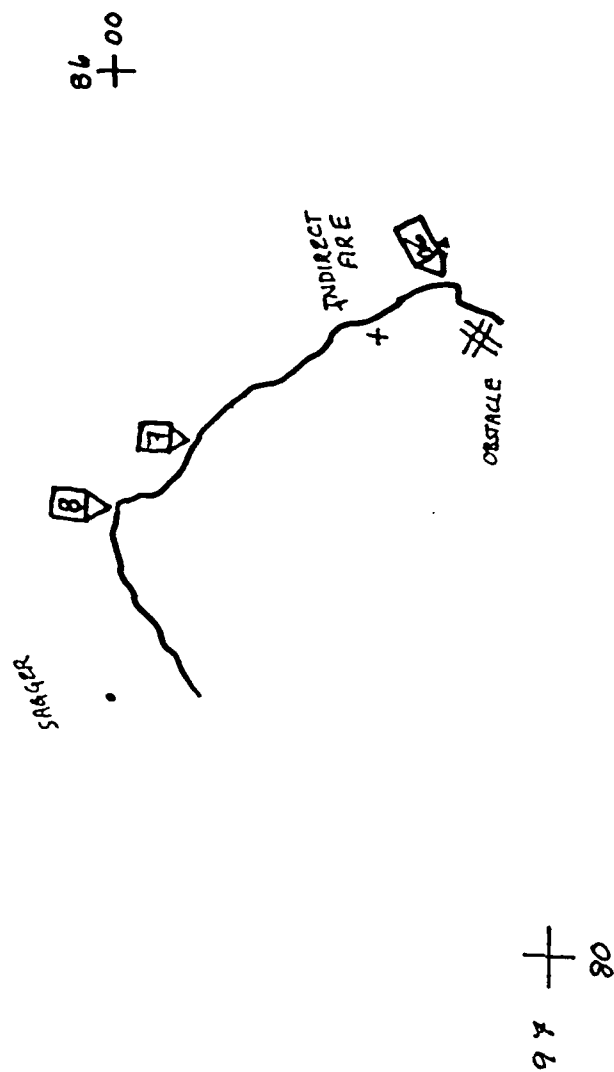


Figure G-2. Controller/OPFOR Overlay for Tactical Roadmarch #2

6. SIMCAT FILE NAME: TRM2.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Tactical Roadmarch #2 exercise, select initial condition set A, file number 2, during system start-up.

APPENDIX H
TACTICAL ROADMARCH #3

APPENDIX H TACTICAL ROADMARCH #3

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Appendix H

TACTICAL ROADMARCH #3

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

- a. Review STX A in FC 17-15-1 and standards for prerequisite tasks listed in Paragraph 3.
- b. Review FC 17-15 for further explanation of tasks as needed.
- c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX A and platoon tasks.
- d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.
- e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Tactical Road March exercises:

(1) Planning combat operations.

(2) Providing command control of a unit. The following tasks from FM 17-19E4 will be learned or reinforced:

071-326-3049 Conduct Troop-Leading Procedures for an Operation
071-326-5502 Issue a Fragmentary Order

c. Main teaching points:

(1) Tactical Planning. Request clarification of your orders and additional guidance if needed for planning. Get information on location of friendly units. Backward plan to hit your SP and RP on time. Anticipate danger points in movement and fire planning.

(2) Reconnaissance. Conduct map reconnaissance. Find terrain features useful in reacting to potential threats.

(3) Troop Leading. Use warning order (WO) to ensure platoon completes timely preparations. Ensure platoon sergeant and tank commanders copy overlay, TRPs, and CEOI correctly. Delegate some duties to platoon sergeant. Emphasize any unusual or nonroutine aspects of mission and plan.

(4) Prepare and Initiate Movement. Start engines together. If vehicles are dispersed in AA, designate a rally point to assemble in march order.

(5) All-round Security. Maintain security throughout movement. Continuously analyze the situation, anticipating possible dangers and possible lapses of vigilance. Exert command and control to prevent surprise. Use formations to maintain mutual support. Plan and request deviations along route to minimize duration and extent of exposure.

(6) Unscheduled Halts. Establish security, report, and take initiative within constraints of orders to overcome the problem.

(7) React to Indirect Fire. Evade the impact area, using irregular movement and/or exhaust smoke to hinder adjustment. Assume MOPP-4, monitor NBC conditions, and request return to lower MOPP level when negative. Establish coordinated movement and all-around security as soon as possible.

(8) Actions on Contact (SAGGER). Use brevity codes, cardinal directions, and drill commands to obtain an immediate response by the platoon. Pop smoke, take cover or move evasively (SAGGER dance), and distribute return fire around the launch point. Continue to move concealed by exhaust smoke. Call suppressive fire after platoon reacts. Conserve ammunition by limiting fire to visible targets or during flight of the missile. Keep the location under observation at least until indirect fire arrives. Maintain observation of other potential threat locations at the same time.

(9) Tactical Road March (General). A tactical road march is not an administrative march. Assume possible contact unless orders indicate otherwise. Clarify rules of engagement; travel with weapons hold, tight, or free. Plan suppressive fires and smoke missions to aid secure movement.

(10) Reconnoiter an Obstacle. Warn the platoon of obstacle and likely contact. Deploy in secure positions and report location and extent of obstacle. Recon by fire, then approach for visual recon with overwatching elements. Check for approach routes, mined areas, breach or bypass points, and complete report. Maintain all-round security when moving to bypass, expect rear engagement, and use exhaust smoke if appropriate.

(11) Move in Column Formation. Check intervals and all-round security as you move. Assign areas of observation to particular tanks when deviation from the SOP is needed.

(12) Actions on Contact. When enemy direct antitank fire is encountered, a platoon should execute the following five steps: (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs

battle drill (action drill or contact drill). If platoon leader does not direct a drill the platoon seeks cover and concealment. (3) Send contact report to the company commander; (4) Develop situation through fire and movement to fix or destroy the enemy; (5) Send spot report to the company commander.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes

ARTEP TASK	TASK/SUBTASK	
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
f. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active counter-measures if necessary to suppress suspected OPFOR positions	Partial
g. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
h. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	

ARTEP TASK	TASK/SUBTASK	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guards	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
i. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes
j. 5-III-2-12-1	Reconnoiter an obstacle	
	01. Encounter an obstacle	Partial
	02. Perform the following action (platoon leader)	Yes
	a. Record all data on a map overlay	
	b. Report all data to company/team commander	
k. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition and report contact to company commander immediately	Yes
	03. Initiate actions	Partial
l. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
m. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial

ARTEP TASK

TASK/SUBTASK

- a. Establish communications with platoon elements and higher headquarters
- b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously
- c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown

4. TRAINING AND EVALUATION SCHEDULE

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of FRAGO	H-30	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues FRAGO, CEOI, map w/overlay to PLT LDR
b. Plt Ldr performs tactical planning/recon	H-25	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	
c. Plt Ldr issues OPORD	H-10	Tng Facility	5-III-2-3-2	Instructor evaluates order for accuracy and completeness. Tape record if desired
d. Platoon stand-to activities/prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks comms and start-up procedures
e. Platoon departs, establishes all-round movement security	H-2	ES691057 (All grids are on SIMCAT)	5-III-2-5-2 5-III-2-5-6 5-III-2-5-7	Instructor checks interval, gun tube orientation, and speed
f. Cross SP/Perform tactical road march	H	ES690053	5-III-2-5-6	Instructor checks time, speed and interval at SP
g. React to indirect fire	H+	ES757998	5-III-2-12-10	Instructor will bring indirect fire in the vicinity of ES757998

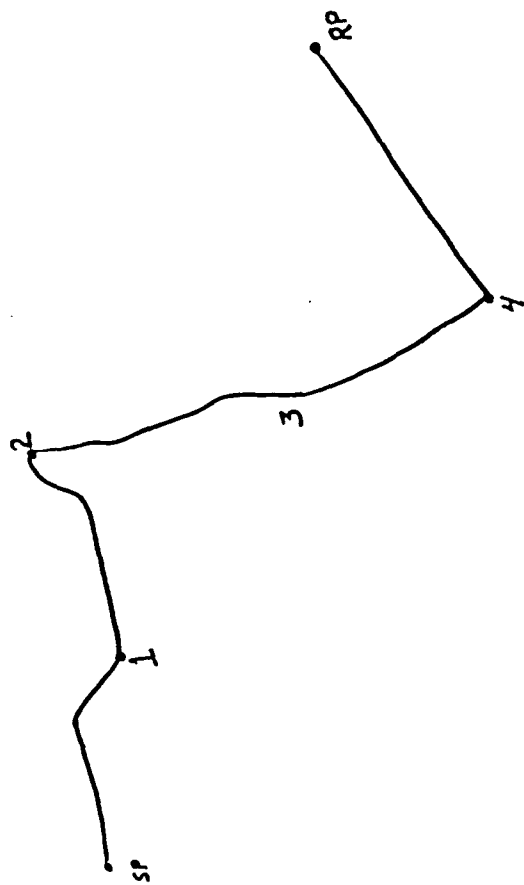
<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
h. Execute actions on contact	H+	ES760982	5-III-2-12-2 5-III-2-5-5	Instructor engages platoon from ES750970 (BMP) or ES765986 (T72) when platoon reaches vicinity
i. Encounter an obstacle	H+	ES737974	5-III-2-5-6 5-III-2-12-1 5-III-2-5-1 5-III-2-5-5	Instructor gives lead vehicle a card stating "Obstacle and the immediate area around appear impassable." OPFOR can engage from vicinity ES786972 (BMP) or ES790981 (T72) and/or bring in indirect if PLT LDR does not take appropriate action
j. Actions on contact	H+	ES779978	5-III-2-12-12 5-III-2-5-5	Instructor engages platoon from ES790981 (T72) or ES786972 (BMP) when platoon reaches vicinity of ES779978
k. Crosses RP	H+	ES784981	5-III-2-5-6	Instructor checks movement through RP and into AA without movement stoppage
l. Platoon moves into AA	H+	ES797972	5-III-2-1-1	Instructor checks on movement into AA, establishment of security, and preparation for continued operation

5. SITUATION. The following situation and FRAGO can be used to initiate this scenario.

Your unit is in a rear assembly area. Your platoon is at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The enemy has been attacking but the units to the front have repulsed initial attacks. There may be combat reconnaissance patrols and patrols from the advanced party that have penetrated our forward units and are in the area. No enemy force stronger than platoon-size is expected to be in the rear area.

"ALERT! CO/TM _____ MOVES AT (_____) HOURS TO DESIGNATED PLATOON
ASSEMBLY AREAS VICINITY COORDINATES (_____), CLOSING ASSEMBLY AREAS NLT
(_____), (your platoon) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
(sister platoon -- simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
_____ PLATOON (simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES
(_____). PLATOON LEADERS REPORT WHEN READY TO MOVE."

74
01 +
RA



A
B
C

80 + 96

Figure H-1. Mission Overlay for Tactical Roadmarch #3

INDIRECT FIRE
ES 757998

T72
ES 765986
CONTACT #1
* ES 160782

T72
ES 770981
CONTACT #2
* ES 777972
BHP
ES 778972

OBSTACLE
ES 773974

BHP
ES 760970

96 + 98

96 + 74

Figure H-2. Controller/OPFOR Overlay for Tactical Roadmarch #3

6. SIMCAT FILE NAME: TRM3.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Tactical Roadmarch #3 exercise, select initial condition set A, file number 3, during system start-up.

APPENDIX I
TACTICAL ROADMARCH #4

APPENDIX I TACTICAL ROADMARCH #4

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Appendix I

TACTICAL ROADMARCH #4

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

a. Review STX A in FC 17-15-1 and standards for prerequisite tasks listed in Paragraph 3.

b. Review FC 17-15 for further explanation of tasks as needed.

c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX A and platoon tasks.

d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.

e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Tactical Road March exercises:

(1) Planning combat operations.

(2) Providing command control of a unit. The following tasks from FM 17-19E4 will be learned or reinforced:

071-326-3049 Conduct Troop-Leading Procedures for an Operation

071-326-5502 Issue a Fragmentary Order

c. Main teaching points:

(1) Tactical Planning. Request clarification of your orders and additional guidance if needed for planning. Get information on location of friendly units. Backward plan to hit your SP and RP on time. Anticipate danger points in movement and fire planning.

(2) Reconnaissance. Conduct map reconnaissance. Find terrain features useful in reacting to potential threats.

(3) Troop Leading. Use warning order (WO) to ensure platoon completes timely preparations. Ensure platoon sergeant and tank commanders copy overlay, TRPs, and CEOI correctly. Delegate some duties to platoon sergeant. Emphasize any unusual or nonroutine aspects of mission and plan.

(4) Prepare and Initiate Movement. Start engines together. If vehicles are dispersed in AA, designate a rally point to assemble in march order.

(5) All-round Security. Maintain security throughout movement. Continuously analyze the situation, anticipating possible dangers and possible lapses of vigilance. Exert command and control to prevent surprise. Use formations to maintain mutual support. Plan and request deviations along route to minimize duration and extent of exposure.

(6) Unscheduled Halts. Establish security, report, and take initiative within constraints of orders to overcome the problem.

(7) React to Indirect Fire. Evade the impact area, using irregular movement and/or exhaust smoke to hinder adjustment. Assume MOPP-4, monitor NBC conditions, and request return to lower MOPP level when negative. Establish coordinated movement and all-around security as soon as possible.

(8) Actions on Contact (SAGGER). Use brevity codes, cardinal directions, and drill commands to obtain an immediate response by the platoon. Pop smoke, take cover or move evasively (SAGGER dance), and distribute return fire around the launch point. Continue to move concealed by exhaust smoke. Call suppressive fire after platoon reacts. Conserve ammunition by limiting fire to visible targets or during flight of the missile. Keep the location under observation at least until indirect fire arrives. Maintain observation of other potential threat locations at the same time.

(9) Tactical Road March (General). A tactical road march is not an administrative march. Assume possible contact unless orders indicate otherwise. Clarify rules of engagement; travel with weapons hold, tight, or free. Plan suppressive fires and smoke missions to aid secure movement.

(10) Reconnoiter an Obstacle. Warn the platoon of obstacle and likely contact. Deploy in secure positions and report location and extent of obstacle. Recon by fire, then approach for visual recon with overwatching elements. Check for approach routes, mined areas, breach or bypass points, and complete report. Maintain all-round security when moving to bypass, expect rear engagement, and use exhaust smoke if appropriate.

(11) Move in Column Formation. Check intervals and all-round security as you move. Assign areas of observation to particular tanks when deviation from the SOP is needed.

(12) Actions on Contact. When enemy direct antitank fire is encountered, a platoon should execute the following five steps: (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs

battle drill (action drill or contact drill). If platoon leader does not direct a drill the platoon seeks cover and concealment. (3) Send contact report to the company commander; (4) Develop situation through fire and movement to fix or destroy the enemy; (5) Send spot report to the company commander.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes

ARTEP TASK	TASK/SUBTASK	
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
f. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active counter-measures if necessary to suppress suspected OPFOR positions	Partial
g. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
h. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	

ARTEP TASK	TASK/SUBTASK	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guards	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
i. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes
j. 5-III-2-12-1	Reconnoiter an obstacle	
	01. Encounter an obstacle	Partial
	02. Perform the following action (platoon leader)	Yes
	a. Record all data on a map overlay	
	b. Report all data to company/team commander	
k. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition and report contact to company commander immediately	Yes
	03. Initiate actions	Partial
l. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
m. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial

ARTEP TASK

TASK/SUBTASK

- a. Establish communications with platoon elements and higher headquarters
- b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously
- c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown

4. TRAINING AND EVALUATION SCHEDULE

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of FRAGO	H-30	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues FRAGO, CEOI, map w/overlay to PLT LDR
b. Plt Ldr performs tactical planning/recon	H-25	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	
c. Plt Ldr issues OPORD	H-10	Tng Facility	5-III-2-3-2	Instructor evaluates order for accuracy and completeness. Tape record if desired
d. Platoon stand-to activities/prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
e. Platoon departs, establishes all-round movement security	H-2	ES812954	5-III-2-5-2 5-III-2-5-6 5-III-2-5-7	Instructor checks interval, gun tube orientation, and speed
f. Cross SP/Perform tactical road march	H	ES808956	5-III-2-5-6	Instructor checks time, speed and interval at SP
g. Execute actions on contact	H+	ES804974	5-III-2-12-2 5-III-2-5-5	OPFOR engages platoon from ES792975 (T72) when platoon reaches vicinity ES804974

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
h. Encounter an obstacle	H+	ES773874	5-III-2-5-6 5-III-2-12-1 5-III-2-5-1 5-III-2-5-5	Instructor gives lead vehicle a card stating "The bridge across the stream is out and the immediate area around the bridge appears impassable." OPFOR can engage from vicinity ES786972 (BMP) or ES790981 (T72) and/or bring in indirect if PLT LDR does not take appropriate action
i. Execute actions on contact	H+	ES760982	5-III-2-12-2 5-III-2-5-5	OPFOR engages platoon from ES750970 (BMP) or ES765986 (T72) when platoon reaches vicinity ES760982
j. React to indirect fire	H+	ES757998	5-III-2-12-10	Instructor will bring indirect fire in the vicinity of ES757998
k. Crosses RP	H+	ES755001	5-III-2-5-6	Instructor checks movement through RP and into AA without movement stoppage
l. Platoon moves into AA	H+	ES745001	5-III-2-1-1	Instructor checks on movement into AA, establishment of security, and preparation for continued operation

5. SITUATION. The following situation and FRAGO can be used to initiate this scenario.

Your unit is in a rear assembly area. Your platoon is at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The enemy has been attacking but the units to the front have repulsed initial attacks. There may be combat reconnaissance patrols and patrols from the advanced party that have penetrated our forward units and are in the area. No enemy force stronger than platoon-size is expected to be in the rear area.

"ALERT! CO/TM _____ MOVES AT (_____) HOURS TO DESIGNATED PLATOON
ASSEMBLY AREAS VICINITY COORDINATES (_____), CLOSING ASSEMBLY AREAS NLT
(_____), (your platoon) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
(sister platoon -- simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES (_____).
_____ PLATOON (simulated) OCCUPIES ASSEMBLY AREA AT COORDINATES
(_____). PLATOON LEADERS REPORT WHEN READY TO MOVE."

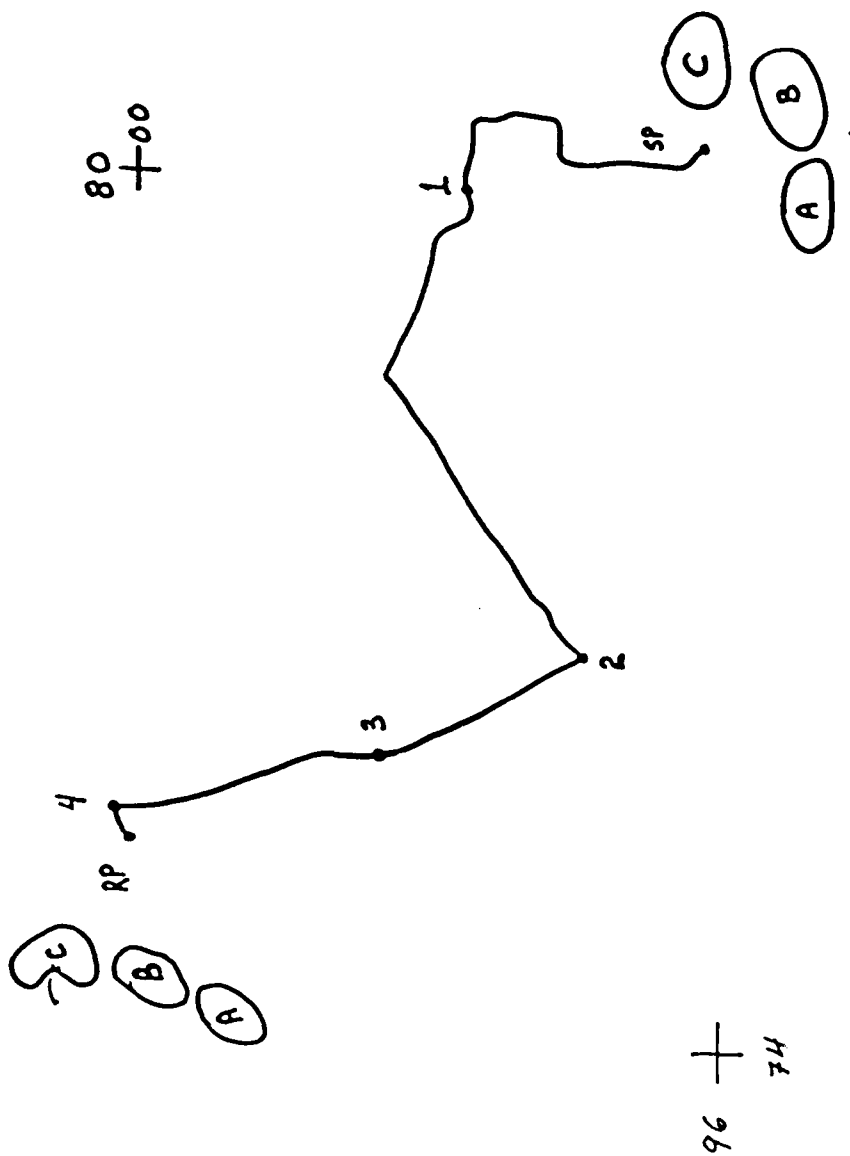


Figure I-1. Mission Overlay for Tactical Roadmarch #4

80 +00

XX INDIRECT FIRE
XX E5757948

T72
E5765986
* CONTACT #2
E5760982

BMP
E5750970

OBSTACLE
E5773974

BMP
E5786972

T72
E5792975

* CONTACT #1
E58049

96 + 74

Figure I-2. Controller/OPFOR Overlay for Tactical Roadmarch #4

6. SIMCAT FILE NAME: TRM4.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Tactical Roadmarch #4 exercise, select initial condition set A, file number 4, during system start-up.

APPENDIX J
MOVEMENT TO CONTACT #1

APPENDIX J MOVEMENT TO CONTACT #1

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Appendix J

MOVEMENT TO CONTACT #1

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

a. Review STX E and STX F in FC 17-15-1 and performance standards listed in Paragraph 3.

b. Review FC 17-15 for further explanation of tasks as needed.

c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX E and STX F and platoon tasks.

d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.

e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Movement to Contact/Hasty Attack exercises:

(1) Planning combat operations.

(2) Providing command control of a unit.

(3) Collective tasks from FC 17-15-1 and individual tasks from FM 17-19 (E/K) (Level 4) that support STX E and STX F.

c. Main teaching points:

(1) Troop-Leading Procedures. The platoon leader should follow the eight steps covered in FC 17-15. These steps are: (1) Receive and analyze the mission; (2) Issue the warning order; (3) Form a tentative plan; (4) Start necessary movement; (5) Conduct reconnaissance; (6) Make decisions and complete the plan; (7) Issue the order; and (8) Supervise and refine (FC 17-15, p 2-4).

(2) Fundamentals of the Offense. The platoon leader should understand and apply the offensive fundamentals covered in FC 17-15. Fundamentals specific to the platoon level are: (1) See the battlefield; (2) Use weapons systems to best advantage; (3) Concentrate overwhelming combat power, shock; (4) Overwhelm and destroy the enemy; (5) Provide continuous mobile support; and (6) Be flexible (FC 17-15, p 3-3).

(3) Actions of the Platoon Leader in the Offense. The platoon leader will control the movement of the platoon, move the platoon as fast as the factors of METT-T will allow, employ all available fires (including indirect), fight his tank as part of the platoon, control the fires of the platoon, and keep the company commander informed of the situation (FC 17-15, p 3-6).

(4) Platoon Offensive Fire Planning. The platoon leaders plans have direct and indirect fires will be used to support movement and other actions during an operation (assault, support by fire). The platoon leader should address the following issues in his plan; engagement of known enemy position; reconnaissance by fire; use of fire or smoke to conceal/cover movement; any support by fire missions; graphics used to control fires; and engagement techniques or fire patterns to be used if different from SOP (FC 17-15, p 3-6).

(5) Movement Techniques. The platoon leader employs the specified technique and formation to reduce danger to the unit while moving. He selects overwatch positions that have cover and concealment, and clear fields of fire. Before he moves an element to the next position, he considers where is next position is, what is route is, where the enemy could be, and what he would do if fired on. While moving, he uses the terrain to provide cover and concealment (FC 17-15, p 3-8).

(6) Actions on Contact. The platoon should execute the following five steps when enemy direct antitank fire in encountered; (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs battle drill (action drill or contact drill); (3) Send contact report to the company commander, (4) Develop situation through fire and movement to fix or destroy the enemy; and (5) Send spot report to the company commander (FC 17-15, p 3-16).

(7) React to Indirect Fire. The platoon will execute the reaction to indirect fire drill. Platoon leader will keep the company commander informed of the situation. The designated NBC vehicle will take prescribed steps to determine the presence of chemical agents (FC 17-15, p 3-27).

(8) Hasty Attack. The platoon will function as the fire support or assault force depending upon the situation. The platoon should be able to quickly transition from a movement to contact to a hasty attack. The platoon will take appropriate actions on the objective once taken (FC 17-15, p 3-34).

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-3-5	Perform contact point activities	
	01. Navigate to contact point	Yes
	02. Secure contact point with available security forces	Yes
	03. Communicate to other contact party	Yes
	04. Navigate through the appropriate passage lane	Yes

f. 5-III-2-3-6	Conduct rehearsals for current mission	
	01. Conduct rehearsals which do not interfere with subordinate unit troop-leading procedures and/or preparations for the actual mission	Yes
	02. Complete the rehearsal per the time schedule	Yes
	03. Identify and correct mistakes during the rehearsals	Yes
g. 5-III-2-4-1	Improve battle positions	
	01. Provide hull-down fighting positions for each vehicles	No
	02. Use any natural obstacle to increase the defendability of the battle position	Partial
	03. Emplace artificial obstacles	No
	04. Employ mines or wire to slow, turn or canalize the OPFOR forward of the battle position	Partial
h. 5-III-2-4-2	Establish perimeter security	
	01. Place vehicles and establish perimeter (platoon leader/platoon sergeant)	Partial
	02. Occupy position given by platoon leader	Partial
	03. Establish fields of fire (platoon leader)	Partial
i. 5-III-2-4-6	Reconnoiter a battle position	
	01. Perform reconnaissance on subsequent battle positions	Partial
	02. Prepare a plan for each BP	Partial
	03. Select covered/concealed routes on trafficable soil	Partial
	04. Select primary, alternate, and supplementary fighting positions	Partial
	05. Select routes to and from the primary, alternate, and supplementary fighting positions	Partial
	06. Select positions which afford long-range fields of fire and flank shots	Yes
	07. Select positions which provide cover and/or reverse slope concealment	Partial
	08. Select at least one OP position	Partial
	09. Ensure that designated TRPs are within range of the weapon systems	Yes
	10. Mark obstacles on a map or overlay and forward it to the commander	Yes

ARTEP TASK	TASK/SUBTASK	
j. 5-III-2-4-7	Perform platoon fire distribution and control	
	01. Distribute fires within the platoon	Yes
	02. Perform fire planning to control fires (platoon leader)	Yes
	03. Perform the following actions	
	a. Avoid target overkill	Yes
	b. Destroy all targets within the platoon sector of fire and engagement area	Yes
	c. Conserve ammunition	Yes
	d. Provide movement and target engagement security by using the organic smoke systems	No
k. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
l. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active countermeasures if necessary to suppress suspected OPFOR positions	Partial
m. 5-III-2-5-4	Bypass an OPFOR position	
	01. Request/receive permission to bypass	Yes
	02. Suppress the OPFOR with direct- and indirect-fires to enable the platoon to bypass and continue the mission	Partial
	03. Select a bypass route that does not fit into OPFOR plan to canalize friendly forces	Yes
	04. Use smoke to conceal movement if applicable	No
	05. Report continuously throughout bypass activities to allow next higher command to monitor bypass phases	Yes
n. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial

ARTEP TASK

TASK/SUBTASK

- | | | |
|----------------|---|---------|
| | 04. If organic systems will not do the job, request smoke/indirect fire support from company/team | Partial |
| | 05. Request resupply of smoke munitions as required | Partial |
| o. 5-III-2-5-6 | Perform a tactical road march | |
| | 01. Report passage of critical points | Yes |
| | 02. Perform movement within time specified in OPORD without exceeding the catch-up speed | Yes |
| | 03. Maintain intervehicular distances | Partial |
| | 04. Move on route of march except: | Yes |
| | a. React to OPFOR | |
| | b. Bypass obstacles | |
| | 05. Orient crew weapon system to provide 360° security overlap | Yes |
| | 06. Maintain air guards | No |
| | 07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column | Partial |
| | 08. Execute actions at halts (IAW 5-III-2-5-1) | Partial |
| | 09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver | Yes |
| p. 5-III-2-5-7 | Establish all-around movement security | |
| | 01. Establish 360° vehicle security by assigning crew members areas of responsibility | Partial |
| | 02. Employ smoke systems as necessary (see Task 5-III-2-5-5) | Partial |
| | 03. Use appropriate techniques of movement | Yes |
| q. 5-III-2-5-8 | Conduct passage of lines | |
| | 01. Prepare for passage of lines | Partial |
| | 02. Issue an OPORD which includes: route of march; order of march; contact point location; recognition signal; radio listening silence in effect; and mission to be accomplished after passage is conducted | Yes |
| | 03. Move to contact point | Yes |
| | 04. Arrive at contact point | Yes |

ARTEP TASK	TASK/SUBTASK	
r. 5-III-2-6-3	Perform visual surveillance	
	01. Assign personnel to perform the surveillance (platoon leader/sergeant)	Partial
	02. Occupy position (assigned personnel)	Partial
	03. Change observers every 20-30 minutes based upon tactical situation and climate	Partial
s. 5-III-2-7-4	Breach a minefield	
	01. Use smoke and suppressive fires to conceal the breaching vehicle(s)	Partial
	02. Conduct breach of minefield	Partial
t. 5-III-2-7-5	Breach an obstacle	
	01. Determine appropriate method to breach obstacle based on the type of obstacle and equipment available	Partial
	02. Conduct the breach so that forward momentum is maintained	Partial
	03. Use smoke and suppressive fire to conceal the breaching team	Partial
	04. Secure near and far side of breach	Partial
	05. Neutralize all OPFOR boobytraps or anti-handling devices	Partial
	06. Cover all breaching vehicles or dismounted personnel from overwatch positions	Yes
	07. Report the location of the breach in eight-digit grid coordinates upon completion of breach	Yes
u. 5-III-2-10-2	Execute a hasty attack	
	01. React to OPFOR presence without hesitation and send a spot report	Yes
	02. Initiate fire and movement to destroy the OPFOR before being fixed by the OPFOR	Yes
	03. Conduct the assault ensuring maneuver elements are overwatched, use of suppressive direct and indirect fire, attack at weakest point and sufficient combat power to defeat OPFOR in detail	Yes
v. 5-III-2-10-3	Assault an OPFOR position	
	01. Select the scheme of maneuver that best suits the terrain, OPFOR situation, and friendly capabilities	Yes
	02. Maneuver through defensive fires making maximum use of available cover and concealment, indirect fires, smoke, and well-placed direct fire	Partial

ARTEP TASK	TASK/SUBTASK	
	03. Maintain concentration of available force at the decisive time and point in the OPFOR's defense	Partial
	04. Breach the defensive position with minimum losses to friendly forces	Partial
	05. Defeat the OPFOR in detail on the objective or force his withdrawal	Partial
	06. Report platoon's actions to higher headquarters	Yes
w. 5-III-2-10-4	Perform breaching force activities	
	01. Move along the best covered and concealed routes to specified breaching position	Partial
	02. Breach OPFOR defenses so that momentum of the attack is not lost	Partial
	03. Establish a hasty defense quickly to hold the gaps through the obstacle while the assault force passes through	Partial
	04. Move to assist the assault force on order	Yes
x. 5-III-2-10-5	Perform assault force activities	
	01. Assault the objective in such a manner as to seize the objective and defeat the OPFOR in detail or force his withdrawal	Partial
	02. Move along the best covered and concealed routes to specific points	Partial
	03. Move as close to supporting fires as possible	Yes
y. 5-III-2-10-6	Perform support force activities	
	01. Maneuver to the best firing positions for coverage of maneuver element	Partial
	02. Coordinate fires with movement of assault force	Yes
	03. Use fire and movement only to move to better firing positions	Yes
	04. Monitor radio nets of assault and breaching forces	Partial
z. 5-III-2-10-7	Perform fire and movement during an attack	
	01. Cross the LD at the designated time, using the designated movement technique and along the designated axis	Yes
	02. Maintain radio listening silence until contact is made	Yes
	03. Maneuver to the objective	Yes
	04. Use appropriate hand and arm signals to control movement.	Yes
	05. Execute the scheme of fire and movement support plan per unit SOP/platoon drills	Yes

ARTEP TASK	TASK/SUBTASK	
aa. 5-III-2-10-8	Perform consolidation activities	
	01. Assess the situation and regain complete control of all elements as quickly as possible	Yes
	02. Eliminate any OPFOR elements remaining on the objective	Yes
	03. Establish security with observation posts	No
	04. Perform reconnaissance to improve security	Partial
	05. Prepare for immediate and future missions	Partial
	06. Position tanks on armor avenues of approach	Partial
	07. Execute preplanned indirect and close air support in support of consolidation of the objective	Yes
	08. Report location and status to the next higher headquarters	Yes
	09. Evacuate casualties, PWs, and damaged equipment IAW OPORD/SOP	No
	10. Redistribute personnel, supplies, ammunition and equipment within the platoon as necessary to continue the mission	No
	11. Update and develop fire plans to support a continued mission	Partial
	12. Execute chemical detection procedures	No
	13. Continue to develop the position	Partial
bb. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition of the OPFOR report contact to company commander immediately and react quickly	Yes
	03. Initiate actions or order for the platoon	Partial
cc. 5-III-2-12-4	Perform reorganization activities	
	01. Establish security and eliminate any OPFOR still in the area	Partial
	02. Report all personnel losses, ammunition expenditures, fuel status, and vehicle conditions, supplies and equipment	Partial
	03. Maintain/restore communication to all element	Partial
	04. Perform maintenance checks and emergency repairs	No
	05. Perform evacuation procedures	No

ARTEP TASK

TASK/SUBTASK

	06. Requisition supplies, equipment, ammunition, fuel, vehicle repair parts and personnel replacements	Partial
dd. 5-III-2-12-5	Maintain contact with the OPFOR	
	01. Maintain contact through surveillance	Partial
	02. Maintain contact through fire and movement	Partial
ee. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately by executing evasive action and buttoning up, screening movement, assuming MOPP4 reporting situation to higher, and/or moving out of the impact area	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes

4. TRAINING AND EVALUATION SCHEDULE

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of Warning Order	H-60	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/Controller issues Warning Order, CEOI and situation to PLT LDR
b. Plt Ldr issues Warning Order	H-50	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/Controller evaluates warning order for accuracy and completeness. Tape record if desired
c. Receipt of OPORD OPORD	H-40	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/controller OPORD and overlays to PLT LDR
d. Plt Ldr issues Plt OPORD	H-20	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/controller evaluates order for accuracy and completeness. Tape record if desired
e. Platoon conducts rehearsals for mission	H-10	Tng Facility	5-III-2-3-6	

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
f. Platoon conducts stand-to and prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
g. Platoon starts movement to contact	H-1	ES76309925	5-III-2-5-2	Controller monitors movement
h. Platoon receives indirect fire	H+5	ES76709865	5-III-2-12-10	Controller initiates indirect fire and monitors response
i. Platoon encounters obstacle	H+7	ES77189835	5-III-2-12-2	OPFOR controller engages w/BMP from ES78609720
j. Platoon engaged by tanks	H+12	ES78059790	5-III-2-12-2 5-III-2-10-2	OPFOR controller engages w/tanks from ES78259813. Controller issues FRAGO to conduct hasty attack ES704016
k. Platoon consolidates on objective	H+15	ES78309815	5-III-2-10-8 5-III-2-12-4	Controller instructs platoon to consolidate on objective

5. SITUATION. The following situation and OPORD can be used to initiate this scenario.

Your platoon is in an assembly area. You are at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The company commander has called you to his location to give a warning order.

OPORD

Task Organization: 1st Plt A/1/14th AR
2nd Plt A/1/13th INF
3rd Plt A/1/14th AR

1. Situation

a. Enemy Forces. Threat forces are believed to be withdrawing in an attempt to stabilize their front. Enemy situation to the front is uncertain. Some activity has been observed in the vicinity of 787973 and 789982.

b. Friendly Forces. TF 1-14 is conducting a movement to contact.

(1) TF 1-14 is conducting a movement to contact.

(2) Tm B is to our left flank conducting a movement to contact.

(3) Tm C is to our right flank conducting a movement to contact.

(4) Tm D will follow as TF reserve.

(5) 1-5 FA is DS to our TF.

2. Mission

Tm A will conduct a movement to contact along axis Iron to seize OBJ Bravo, be prepared to continue the attack on order.

3. Execution

a. Concept of the Operation. (Operation overlay - drawn on commander's map sheet).

(1) Maneuver. Tm A will cross LD/LC at _____ hours. Tm A will conduct a movement to contact using traveling overwatch to seize OBJ Bravo. Tm A will use a company/team wedge with 1st Plt in the center, third platoon the right and second platoon on the left.

(2) Fires. There will be a 5 minute mortar and artillery prep for OBJ Bravo on call. Priority of fires to 1st Plt initially.

b. First Platoon. Move using wedge; you will be overwatched by third and second platoons.

c. Third Platoon. Move as the right portion of a company/team wedge. Overwatch first platoon who will be the point of the wedge.

d. Second Platoon. Move as the left portion of a company/team wedge. Overwatch first platoon who will be the point of the wedge.

e. Coordinating Instructions

- (1) ADA status is weapons free.
- (2) Report crossing and clearing all phase lines.
- (3) MOPP 0 level in effect.
- (4) Report any enemy obstacles.
- (5) Report reaching the objectives.

4. Service Support

a. Bn/TF combat trains located at 724987. Co CBT trains will follow one phase line behind company combat units.

b. Evacuate vehicles to equipment rally point vicinity 760984.

5. Command and Signal.

a. CEOI Set 1 Period 1 in effect. Listening silence in effect until start road march.

b. Cdr will move with third platoon initially. XO will move with second platoon.

c. Security of Communications Activity Level (SCALE) 1 will be used.

TARGET LIST

<u>LN #</u>	<u>TGT #</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
1	AA2201	Hill Top	77939815
2	AA2202	Hill Top	79279827
3	AA2203	Hill Top	79019710
4	AA2204	Road Junction	80159607
5	AA2205	Hill Top	79139526
6	AA2206	Hill Top	81889544
7	AA2207	Hill Top	80889201

80 — 99

X T72
ES 792 981

X X INDIRECT SAGGER
X X ES 778 978 ES 788 978

X
EMP
ES 767 973

74 — 97

Figure J-2. Controller/OPFOR Overlay for Movement to Contact #1

6. SIMCAT FILE NAME: MTC1.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Movement to Contact #1 exercise, select initial condition set A, file number 5, during system start-up.

APPENDIX K
MOVEMENT TO CONTACT #2

APPENDIX K MOVEMENT TO CONTACT #2

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Appendix K

MOVEMENT TO CONTACT #2

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

a. Review STX E and STX F in FC 17-15-1 and performance standards listed in Paragraph 4.

b. Review FC 17-15 for further explanation of tasks as needed.

c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX E and STX F and platoon tasks.

d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.

e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the Movement to Contact/Hasty Attack exercises:

(1) Planning combat operations.

(2) Providing command control of a unit.

(3) Collective tasks from FC 17-15-1 and individual tasks from FM 17-19 (E/K) (Level 4) that support STX E and STX F.

c. Main teaching points:

(1) Troop-Leading Procedures. The platoon leader should follow the eight steps covered in FC 17-15. These steps are: (1) Receive and analyze the mission; (2) Issue the warning order; (3) Form a tentative plan; (4) Start necessary movement; (5) Conduct reconnaissance; (6) Make decisions and complete the plan; (7) Issue the order; and (8) Supervise and refine (FC 17-15, p 2-4).

(2) Fundamentals of the Offense. The platoon leader should understand and apply the offensive fundamentals covered in FC 17-15. Fundamentals specific to the platoon level are: (1) See the battlefield; (2) Use weapons systems to best advantage; (3) Concentrate overwhelming combat power, shock; (4) Overwhelm and destroy the enemy; (5) Provide continuous mobile support; and (6) Be flexible (FC 17-15, p 3-3).

(3) Actions of the Platoon Leader in the Offense. The platoon leader will control the movement of the platoon, move the platoon as fast as the factors of METT-T will allow, employ all available fires (including indirect), fight his tank as part of the platoon, control the fires of the platoon, and keep the company commander informed of the situation (FC 17-15, p 3-6).

(4) Platoon Offensive Fire Planning. The platoon leaders plans have direct and indirect fires will be used to support movement and other actions during an operation (assault, support by fire). The platoon leader should address the following issues in his plan; engagement of known enemy position; reconnaissance by fire; use of fire or smoke to conceal/cover movement; any support by fire missions; graphics used to control fires; and engagement techniques or fire patterns to be used if different from SOP (FC 17-15, p 3-6).

(5) Movement Techniques. The platoon leader employs the specified technique and formation to reduce danger to the unit while moving. He selects overwatch positions that have cover and concealment, and clear fields of fire. Before he moves an element to the next position, he considers where is next position is, what is route is, where the enemy could be, and what he would do if fired on. While moving, he uses the terrain to provide cover and concealment (FC 17-15, p 3-8).

(6) Actions on Contact. The platoon should execute the following five steps when enemy direct antitank fire in encountered; (1) Return fire and alert the platoon (contact report); (2) Platoon leader directs battle drill (action drill or contact drill); (3) Send contact report to the company commander, (4) Develop situation through fire and movement to fix or destroy the enemy; and (5) Send spot report to the company commander (FC 17-15, p 3-16).

(7) React to Indirect Fire. The platoon will execute the reaction to indirect fire drill. Platoon leader will keep the company commander informed of the situation. The designated NBC vehicle will take prescribed steps to determine the presence of chemical agents (FC 17-15, p 3-27).

(8) Hasty Attack. The platoon will function as the fire support or assault force depending upon the situation. The platoon should be able to quickly transition from a movement to contact to a hasty attack. The platoon will take appropriate actions on the objective once taken (FC 17-15, p 3-34).

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
c. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
d. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
e. 5-III-2-3-5	Perform contact point activities	
	01. Navigate to contact point	Yes
	02. Secure contact point with available security forces	Yes
	03. Communicate to other contact party	Yes

ARTEP TASK	TASK/SUBTASK	
	04. Navigate through the appropriate passage lane	Yes
f. 5-III-2-3-6	Conduct rehearsals for current mission	
	01. Conduct rehearsals which do not interfere with subordinate unit troop-leading procedures and/or preparations for the actual mission	Yes
	02. Complete the rehearsal per the time schedule	Yes
	03. Identify and correct mistakes during the rehearsals	Yes
g. 5-III-2-4-1	Improve battle positions	
	01. Provide hull-down fighting positions for each vehicles	No
	02. Use any natural obstacle to increase the defendability of the battle position	Partial
	03. Emplace artificial obstacles	No
	04. Employ mines or wire to slow, turn or canalize the OPFOR forward of the battle position	Partial
h. 5-III-2-4-2	Establish perimeter security	
	01. Place vehicles and establish perimeter (platoon leader/platoon sergeant)	Partial
	02. Occupy position given by platoon leader	Partial
	03. Establish fields of fire (platoon leader)	Partial
i. 5-III-2-4-6	Reconnoiter a battle position	
	01. Perform reconnaissance on subsequent battle positions	Partial
	02. Prepare a plan for each BP	Partial
	03. Select covered/concealed routes on trafficable soil	Partial
	04. Select primary, alternate, and supplementary fighting positions	Partial
	05. Select routes to and from the primary, alternate, and supplementary fighting positions	Partial
	06. Select positions which afford long-range fields of fire and flank shots	Yes
	07. Select positions which provide cover and/or reverse slope concealment	Partial
	08. Select at least one OP position	Partial
	09. Ensure that designated TRPs are within range of the weapon systems	Yes
	10. Mark obstacles on a map or overlay and forward it to the commander	Yes

ARTEP TASK	TASK/SUBTASK	
j. 5-III-2-4-7	Perform platoon fire distribution and control	
	01. Distribute fires within the platoon	Yes
	02. Perform fire planning to control fires (platoon leader)	Yes
	03. Perform the following actions	
	a. Avoid target overkill	Yes
	b. Destroy all targets within the platoon sector of fire and engagement area	Yes
	c. Conserve ammunition	Yes
	d. Provide movement and target engagement security by using the organic smoke systems	No
k. 5-III-2-5-1	Execute action at a halt	
	01. Perform scheduled halt actions	Partial
	02. Perform unscheduled halt actions	Partial
	03. Move out as a unit at the designated time or on order	Yes
l. 5-III-2-5-2	Execute travel	
	01. Maintain orientation along the designated route or axis using column, line or wedge formations	Yes
	02. Maintain visual contact between the sections for the duration of the movement	Yes
	03. Establish positions for vehicles	Yes
	04. Vehicle commanders take active countermeasures if necessary to suppress suspected OPFOR positions	Partial
m. 5-III-2-5-4	Bypass an OPFOR position	
	01. Request/receive permission to bypass	Yes
	02. Suppress the OPFOR with direct- and indirect-fires to enable the platoon to bypass and continue the mission	Partial
	03. Select a bypass route that does not fit into OPFOR plan to canalize friendly forces	Yes
	04. Use smoke to conceal movement if applicable	No
	05. Report continuously throughout bypass activities to allow next higher command to monitor bypass phases	Yes
n. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial

ARTEP TASK	TASK/SUBTASK	
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
o. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guards	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
p. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes
q. 5-III-2-5-8	Conduct passage of lines	
	01. Prepare for passage of lines	Partial
	02. Issue an OPORD which includes: route of march; order of march; contact point location; recognition signal; radio listening silence in effect; and mission to be accomplished after passage is conducted	Yes
	03. Move to contact point	Yes
	04. Arrive at contact point	Yes

ARTEP TASK	TASK/SUBTASK	
r. 5-III-2-6-3	Perform visual surveillance	
	01. Assign personnel to perform the surveillance (platoon leader/sergeant)	Partial
	02. Occupy position (assigned personnel)	Partial
	03. Change observers every 20-30 minutes based upon tactical situation and climate	Partial
s. 5-III-2-7-4	Breach a minefield	
	01. Use smoke and suppressive fires to conceal the breaching vehicle(s)	Partial
	02. Conduct breach of minefield	Partial
t. 5-III-2-7-5	Breach an obstacle	
	01. Determine appropriate method to breach obstacle based on the type of obstacle and equipment available	Partial
	02. Conduct the breach so that forward momentum is maintained	Partial
	03. Use smoke and suppressive fire to conceal the breaching team	Partial
	04. Secure near and far side of breach	Partial
	05. Neutralize all OPFOR boobytraps or anti-handling devices	Partial
	06. Cover all breaching vehicles or dismounted personnel from overwatch positions	Yes
	07. Report the location of the breach in eight-digit grid coordinates upon completion of breach	Yes
u. 5-III-2-10-2	Execute a hasty attack	
	01. React to OPFOR presence without hesitation and send a spot report	Yes
	02. Initiate fire and movement to destroy the OPFOR before being fixed by the OPFOR	Yes
	03. Conduct the assault ensuring maneuver elements are overwatched, use of suppressive direct and indirect fire, attack at weakest point and sufficient combat power to defeat OPFOR in detail	Yes
v. 5-III-2-10-3	Assault an OPFOR position	
	01. Select the scheme of maneuver that best suits the terrain, OPFOR situation, and friendly capabilities	Yes
	02. Maneuver through defensive fires making maximum use of available cover and concealment, indirect fires, smoke, and well-placed direct fire	Partial

ARTEP TASK	TASK/SUBTASK	
	03. Maintain concentration of available force at the decisive time and point in the OPFOR's defense	Partial
	04. Breach the defensive position with minimum losses to friendly forces	Partial
	05. Defeat the OPFOR in detail on the objective or force his withdrawal	Yes
	06. Report platoon's actions to higher headquarters	Yes
w. 5-III-2-10-4	Perform breaching force activities	
	01. Move along the best covered and concealed routes to specified breaching position	Partial
	02. Breach OPFOR defenses so that momentum of the attack is not lost	Partial
	03. Establish a hasty defense quickly to hold the gaps through the obstacle while the assault force passes through	Partial
	04. Move to assist the assault force on order	Yes
x. 5-III-2-10-5	Perform assault force activities	
	01. Assault the objective in such a manner as to seize the objective and defeat the OPFOR in detail or force his withdrawal	Partial
	02. Move along the best covered and concealed routes to specific points	Partial
	03. Move as close to supporting fires as possible	Yes
y. 5-III-2-10-6	Perform support force activities	
	01. Maneuver to the best firing positions for coverage of maneuver element	Partial
	02. Coordinate fires with movement of assault force	Yes
	03. Use fire and movement only to move to better firing positions	Yes
	04. Monitor radio nets of assault and breaching forces	Partial
z. 5-III-2-10-7	Perform fire and movement during an attack	
	01. Cross the LD at the designated time, using the designated movement technique and along the designated axis	Yes
	02. Maintain radio listening silence until contact is made	Yes
	03. Maneuver to the objective	Yes
	04. Use appropriate hand and arm signals to control movement.	Yes

ARTEP TASK	TASK/SUBTASK	
	05. Execute the scheme of fire and movement support plan per unit SOP/platoon drills	Yes
aa. 5-III-2-10-8	Perform consolidation activities	
	01. Assess the situation and regain complete control of all elements as quickly as possible	Yes
	02. Eliminate any OPFOR elements remaining on the objective	Yes
	03. Establish security with observation posts	No
	04. Perform reconnaissance to improve security	Partial
	05. Prepare for immediate and future missions	Partial
	06. Position tanks on armor avenues of approach	Partial
	07. Execute preplanned indirect and close air support in support of consolidation of the objective	Yes
	08. Report location and status to the next higher headquarters	Yes
	09. Evacuate casualties, PWs, and damaged equipment IAW OPORD/SOP	No
	10. Redistribute personnel, supplies, ammunition and equipment within the platoon as necessary to continue the mission	No
	11. Update and develop fire plans to support a continued mission	Partial
	12. Execute chemical detection procedures	No
	13. Continue to develop the position	Partial
bb. 5-III-2-12-2	Execute actions on contact	
	01. Return fire immediately, react to OPFOR fire and deploy	Partial
	02. Determine OPFOR strength, composition and disposition of the OPFOR report contact to company commander immediately and react quickly	Yes
	03. Initiate actions or order for the platoon	Partial
cc. 5-III-2-12-4	Perform reorganization activities	
	01. Establish security and eliminate any OPFOR still in the area	Partial
	02. Report all personnel losses, ammunition expenditures, fuel status, and vehicle conditions, supplies and equipment	Partial
	03. Maintain/restore communication to all elements	Partial

ARTEP TASK	TASK/SUBTASK	
	04. Perform maintenance checks and emergency repairs	No
	05. Perform evacuation procedures	No
	06. Requisition supplies, equipment, ammunition, fuel, vehicle repair parts and personnel replacements	Partial
dd. 5-III_2-12-5	Maintain contact with the OPFOR	
	01. Maintain contact through surveillance	Partial
	02. Maintain contact through fire and movement	Partial
ee. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately by executing evasive action and buttoning up, screening movement, assuming MOPP4 reporting situation to higher, and/or moving out of the impact area	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes

4. TRAINING AND EVALUATION SCHEDULE

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of Warning Order	H-60	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/Controller issues Warning Order, CEOI and situation to PLT LDR
b. Plt Ldr issues Warning Order	H-50	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/Controller evaluates warning order for accuracy and completeness. Tape record if desired
c. Receipt of OPORD	H-40	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/controller OPORD and overlays to PLT LDR
d. Plt Ldr issues Plt OPORD	H-20	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	Instr/controller evaluates order for accuracy and completeness. Tape record if desired

	<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
e.	Platoon conducts rehearsals for mission	H-10	Tng Facility	5-III-2-3-6	
f.	Platoon conducts stand-to and prepares for departure	H-5	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
g.	Platoon starts movement to contact	H-1	ES79209780	5-III-2-5-2	Controller monitors movement
h.	Platoon engaged by sagger	H+2	ES78809780	5-III-2-12-2	OPFOR controller engages w/BMP from ES76759730
i.	Platoon receives indirect fire	H+7	ES778977	5-III-2-12-10	Controller initiates indirect fire and monitors response
j.	Platoon consolidates on objective	H+10	ES76409760		
k.	Platoon receives FRAGO to continue movement to contact	H+12	ES76409760	5-III-2-3-2 5-III-2-3-3	Controller issues FRAGO
l.	Platoon engaged by tanks	H+15	ES75809780	5-III-2-12-2 5-III-2-10-2	OPFOR controller engages w/tanks from ES78259813. Controller issues FRAGO to conduct hasty attack ES704016
m.	Platoon consolidates on objective	H+20	ES75059805	5-III-2-10-8 5-III-2-12-4	Controller instructs platoon to consolidate on objective

5. SITUATION. The following situation and OPORD can be used to initiate this scenario.

Your platoon is in an assembly area. You are at full strength, well-rested and ready to get into the fight. You are currently in security readiness condition (REDCON) 3 (Reduced Security). The company commander has called you to his location to give a warning order.

OPORD #2

Task Organization: 1st Plt A/1/14th AR
3rd Plt A/1/14th AR
2nd Plt A/1/13th INF

1. Situation

a. Enemy Forces. Threat forces are believed to be withdrawing in an attempt to stabilize their front. Enemy situation to the front is uncertain. Some activity has been observed in the vicinity of 767970 and 764974.

b. Friendly Forces. TF 1-14 is conducting a movement to contact.

(1) TF 1-14 is conducting a movement to contact.

(2) Tm B is to our left flank conducting a movement to contact.

(3) Tm C is to our right flank conducting a movement to contact.

(4) Tm D will follow Tm A as TF reserve.

(5) 1-5 FA is DS to our TF.

2. Mission

Tm A will conduct a movement to contact along axis Iron to seize OBJ Bravo, be prepared to continue the attack on order.

3. Execution

a. Concept of the Operation. (Operation overlay - drawn on commander's map sheet).

(1) Maneuver. Tm A will cross LD/LC at _____ hours. Tm A will conduct a movement to contact using traveling overwatch to seize OBJ _____. Tm A will use a company/team wedge with 1st Plt in the center, third platoon the right and second platoon on the left.

(2) Fires. There will be a 5 minute mortar and artillery prep for OBJ Bravo on call. Priority of fires to 1st Plt initially.

b. First Platoon. Move using wedge; you will be overwatched by third and second platoons.

c. Third Platoon. Move as the right portion of a company/team wedge. Overwatch first platoon who will be the point of the wedge.

d. Second Platoon. Move as the left portion of a company/team wedge. Overwatch first platoon who will be the point of the wedge.

e. Coordinating Instructions

- (1) ADA status is weapons free.
- (2) Report phase lines.
- (3) MOPP 0 level in effect.
- (4) Report any enemy obstacles.
- (5) Report reaching the objectives.

4. Service Support

a. Bn/TF combat trains located at 828987. Co CBT trains will follow one phase line behind company combat units.

b. Evacuate vehicles to equipment rally point vicinity 802961.

5. Command and Signal.

a. CEOI Set 1 Period 1 in effect. Listening silence in effect until start road march.

b. Cdr will move with third platoon initially. XO will move with second platoon.

c. Security of Communications Activity Level (SCALE) 1 will be used.

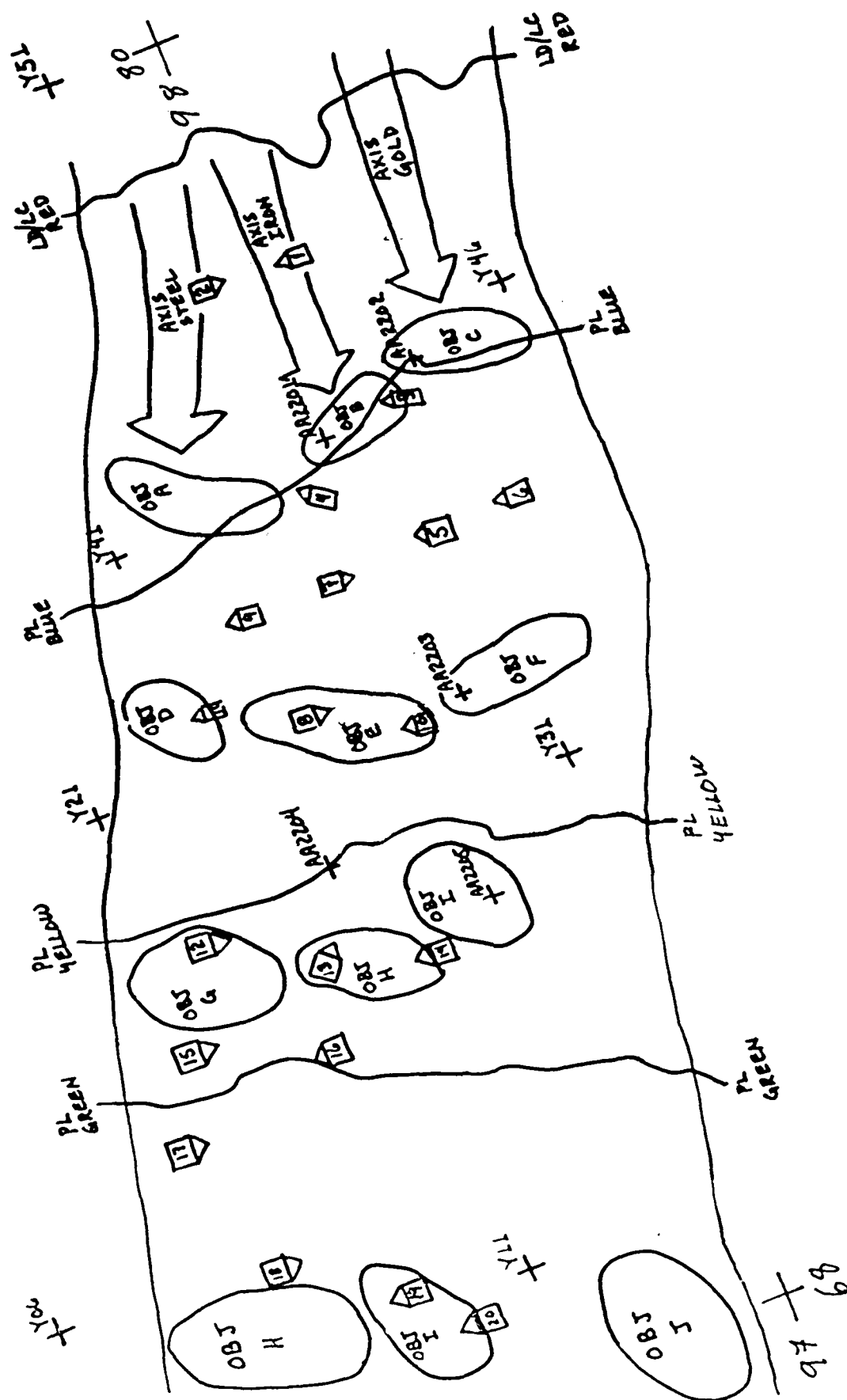


Figure K-1. Mission Overlay for Movement to Contact #2

TARGET LIST

<u>LN #</u>	<u>TGT #</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
1	AA2201	Hill Top (Obj B)	76309792
2	AA2202	Road Junction (Obj C)	76509696
3	AA2203	Road Junction (Obj F)	73839766
4	AA2204	Road Junction	72839930
5	AA2205	Road Junction	72109807

80
+00

+2 772
EST 1200 CONTRACT
* TOWELS
ES 108 978

INDIRECT
* EST 1077

CONTRACT
* SAGGER
ES 100 978

+ 8MP
+ 88 675 9730

74
+
96

Figure K-2. Controller/OPFOR Overlay for Movement to Contact #2

6. SIMCAT FILE NAME: MTC2.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Movement to Contact #2 exercise, select initial condition set B, file number 1, during system start-up.

APPENDIX L
HASTY DEFENSE #1

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APPENDIX L HASTY DEFENSE #1

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Figure L-1. Mission Overlay for Hasty Defense #1L-22

Appendix L

HASTY DEFENSE #1

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

- a. Review STX B in FC 17-15-1 and performance standards listed in Paragraph 3.
- b. Review FC 17-15 for further explanation of tasks as needed.
- c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX B and platoon tasks.
- d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.
- e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the defense exercises:

- (1) Plan combat operations.
- (2) Provide command control of a unit.
- (3) Collective tasks from FC 17-15-1 and individual tasks from FM 17-19 (E/K) (Level 4) that support STX B.

c. Main teaching points:

(1) Receive FRAGO. In the defense, check the sectors of fire assigned to other elements of the team to determine how they overlap and relate to your sector. Range limits for direct fire engagement, likely enemy movements, target priorities, and fire distribution and control in overlapping sectors are important to understanding your platoon's role. Request clarification and additional guidance as needed for planning. Understand the priorities established in the mission among goals of holding position, minimizing losses, reducing the enemy force, restricting enemy freedom of action, and conserving resources.

(2) Reconnaissance. In conducting map reconnaissance, identify the enemy avenues of approach, routes into and out of your BP and hide positions, rally points, positions for OPs (day and night), support routes and locations (resupply, medical, etc.). Analyze the terrain thoroughly to identify fields of fire and dead spaces, to select fighting positions, to relate positions to fire control measures, and anticipate enemy actions and counteractions. Recognize problems posed by terrain features and determine if additional TRP, adjustments to the BP, or other solutions (e.g., obstacles, mines) are needed.

(3) Tactical Planning. Based on the task priorities established by SOP, the situation and mission, and the time available, backward plan to be ready in position at the designated time. Plan and allocate personnel to complete tasks concurrently. Apply the factors of METT given on p 2-8 of FC 17-15 to plan the sequence of events in preparing and conducting the defense. Mentally rehearse the progression of events during the battle and the commands and reports you expect to give.

(4) Troop Leading. On receipt of a FRAGO, issue a WO to alert your platoons and get preparations started. Indicate mission and time, actions required, and the place and time further orders will be given (what, when, who, why, how). Delegate tasks and set timelines for actions required. In the defense, you may have to give a FRAGO to prepare the initial BP, then recon subsequent position, complete tactical planning, and give a detailed OPORD later. If time does not permit the TCs to see their subsequent positions, the OPORD must be particularly detailed and explicit. Ensure that the Plt Sgt and TCs copy the graphic control measures correctly before you depart on reconnaissance. Check the TCs range cards to make sure they execute the platoon fire plan correctly. If time permits, inspect each position and rehearse the TC's reactions to planned commands controlling platoon fires and movements. Ensure that the Plt Sgt understands the concept of the defensive operation and is prepared to take over command.

(5) Stand-to-Activities (Day). Ensure all equipment is stowed and personnel accounted for. Establish communications, start engines together, check status of vehicles, and give a SITREP before moving out.

(6) Occupy Battle Position. The normal priority of tasks is to position tanks, establish security, camouflage, and establish wire communication (latter two not simulated). Two hours to contact should allow preparation of range cards and platoon fireplan and coordination with adjacent units. Fireplan should include entrance/egress routes, rally point at start of maximum ranges and dead spaces, Plt TRPs and list of tanks able to fire on each, hide and OP positions, and coordinating signals and/or commo with adjacent platoons to control fires in the overlapping area.

(7) Reconnaissance of a Battle Position. When TCs cannot accompany you to a subsequent battle position, take along a crew member from the Plt Sgts section so that he will be able to guide tanks in that section to their proper positions. Alternatively, you should mark positions and entrance points on the routes to the positions. If tanks are misplaced, your fireplan may not work as intended. If some positions offer cover, but not concealment, concealed hide positions should be found nearby. Try to choose routes that will not reveal the position through tracks or broken vegetation. If

this is not possible, choose additional routes to be traveled over to leave deceptive markings. Consider possibilities for counterattack and pursuit of remnants of the enemy force. Locate temporary fighting positions along the route that offer the opportunity for sudden appearance, disappearance, and reappearance at unexpected locations.

(8) Surveillance Activity. In a defensive position behind forward positions, a weapons posture should be adopted suitable to the situation. Try to confirm the friend/foe status of possible targets. Report activity and control the Plt to avoid fire on friendly forces and premature exposure of the position.

(9) Perimeter Security/OPs. Preparation for night operations should start as soon as possible after occupation of the BP and whenever the platoon may remain on the position overnight. Plans for limited visibility conditions should be included in the OPORD if possible, or an additional FRAGO given later. The fireplan must be adjusted based on the capabilities of NODs available. OPs must be thoroughly briefed on security and reporting procedures.

(10) Stand-to Activities (Night). In the defense, stand-to should occur BMNT. Stand-to in hide positions should be completed while OPs remain in position. Recall OPs when vehicles move to their fighting position.

(11) React to Indirect Fire. Button up, order MOPP-4, and move to evade impact area while continuing to cover assigned sector. Return to fighting positions as soon as possible. When chemical agents are detected, give alarm and NBC-1 report.

(12) Provide Plt Command and Control. Request authentication of operating instructions. On receipt of FRAGO, be alert to elements that alter or expand previous orders and that require changes from the prior OPORD to the platoon. Give a FRAGO that is a brief, accurate, clear, and establishes priorities and sequence when more than one task must be accomplished. Stress and confusion are reduced by getting the platoon moving on a definite course of action.

(13) Displace to Battle Position. Move rapidly on planned route. Transport wounded and arrange evacuation and resupply as needed on subsequent position. Minimize delay by unexpected obstacles or unplanned events. Use smoke as necessary to conceal movement.

(14) Cross Chemically Contaminated Area. Maintain MOPP level required by the danger. Determine the nature and persistency of the agent and the boundaries of the area to the extent possible with available equipment. Plan decontamination actions consistent with mission requirements. When contacting friendly elements, warn of possible persistent contamination.

(15) Actions at a Halt/Evacuate Casualty. Identify contact as friendly element, warn of possible contamination, maintain security, minimize delay, and resume mission.

(16) Occupy Battle Position. In a hasty occupation, move the tanks directly to turret down position. Ensure the TCs are properly oriented to the TRPs, routes, and other important terrain features. When oriented, move to hull down fighting positions and begin to prepare range cards and Plt fireplan. Continue to improve the position with the time and resources available. Move back to hide positions as soon as possible. Prepare primary positions and submit fireplan in 30 minutes.

(17) Occupy Covered/Concealed Positions. To deter recognition of positions by OPFOR, avoid leaving signs along routes to positions. Enter from rear, use natural terrain patterns and camouflage material, and maintain concealment discipline. When preparations are complete, move back from fighting positions to more fully screened positions and turn off engines, leaving OPs to warn of enemy approach.

(18) Fire Distribution and Control. Ambush tactics may be used when adequate force is available to rapidly destroy the enemy force. Issue a Plt fire command, ensure fire is withheld until command of execution, and shift fires to avoid overkill. Remain in position to sustain a high rate of fire as long as enemy cannot return effective fire. Cease fire promptly when targets are destroyed. Shift one section to supplementary positions to regain LOS to targets blocked by destroyed vehicles or pinned in covered positions, while a section continues watch on escape routes.

(19) Maintain Contact with the OPFOR. When so ordered, maintain contact through fire and movement to pursue and complete destruction of the OPFOR. Although speed is paramount, avoid leaving signs that would subsequently reveal the fighting positions. If necessary, take up new positions when the Plt returns. Report destruction of targets or breaks in contact.

(20) Occupy Battle Position/Conduct Overwatch. Continue to avoid revealing signs in reoccupying a position. Positively identify withdrawing element when providing overwatch. Coordinate fireplans with unit established in an adjacent position.

(21) Platoon Fire Distribution and Control. Ensure that the platoon fire command is unambiguous in designating a target or group of targets for each tank. Use control measures and fire patterns to get as many flank shots as possible. Move after firing 1-2 rounds per target in the initial engagement, if there are a large number. If there are less than four targets, look for an extra command or support vehicle in your sector or double up on the most dangerous target. Direct engagement by platoon, section, or within section according to the needs of the situation, if not preplanned. When you see the OPFOR preparing to fire by platoon on one tank, order the TC to move while you continue to engage with the remainder of the platoon. Use all available assets, e.g., indirect fire obstacles, terrain, to isolate portions of the enemy force to be able to engage the enemy piecemeal with direct fire. Use .50 cal simultaneously on light armor, if main guns are targeted. Report

contact and engagement, platoon movement and results of fire, and enemy activity. As the battle proceeds, adjust the platoon fire distribution to implement the commanders plan and orders. Be alert to possibilities of gaining advantage by counterattacking by fire from unplanned positions, or by counterattacking by fire and movements to create surprise.

(22) Movement Security Using Smoke. Planning for use of smoke should be an integral part of the defense plan. Direct use of on-board smoke as needed to cover firing positions when moving to alternate or supplementary positions. Ensure that exhaust smoke either covers the area entirely or is cut off soon enough to avoid revealing the tanks' locations in the new positions. If available, use smokepots in front of the positions in preference to on-board smoke. Be aware of wind strength and direction and the effects of wind in moving and dissipating the smoke. Use artillery smoke to screen movement away from the battle position when disengaging. Use on-board smoke only in emergencies, but try to avoid revealing the movement route when it is used.

(23) Break Contact with the Enemy. Make maximum use of terrain to shield the platoon's movement. Use artillery fire and smoke to slow the occupation of the battle position and pursuit. If overwatch is provided by another unit, move rapidly and avoid engagement. If not overwatched, bounding by section may be required until contact is broken.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
	07. Ensure that personnel requirements are cared for	Partial
b. 5-III-2-2-1	Disengage from the OPFOR	
	01. Develop a plan for disengagement (platoon leader)	Yes
	02. Initiate the disengagement (platoon leader)	Yes

ARTEP TASK	TASK/SUBTASK	
	03. Conduct disengagement and withdrawal	Partial
	04. Use all aids for disengagement from the enemy	Partial
	05. Lay a close-in screen for the disengagement	Partial
c. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
d. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
e. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
f. 5-III-2-3-5	Perform contact point activities	
	01. Navigate to contact point	Yes
	02. Secure contact point with available security forces	Yes
	03. Communicate to other contact party	Yes
	04. Navigate through the appropriate passage lane	Yes
g. 5-III-2-3-6	Conduct rehearsals for current mission	
	01. Conduct rehearsals which do not interfere with subordinate unit troop-leading procedures and/or preparations for the actual mission	Yes

ARTEP TASK	TASK/SUBTASK	
	02. Complete the rehearsal per the time schedule	Yes
	03. Identify and correct mistakes during the rehearsals	Yes
h. 5-III-2-4-1	Improve battle positions	
	01. Provide hull-down fighting positions for each vehicles	No
	02. Use any natural obstacle to increase the defendability of the battle position	Partial
	03. Emplace artificial obstacles	No
	04. Employ mines or wire to slow, turn or canalize the OPFOR forward of the battle position	Partial
i. 5-III-2-4-2	Establish perimeter security	
	01. Place vehicles and establish perimeter (platoon leader/platoon sergeant)	Partial
	02. Occupy position given by platoon leader	Partial
	03. Establish fields of fire (platoon leader)	Partial
j. 5-III-2-4-3	Prepare subsequent battle positions	
	01. Reconnoiter route(s) to subsequent battle position(s) for cover/concealment and trafficability (platoon leader/platoon sergeant)	Partial
	02. Reconnoiter vehicle positions, firing positions and OP locations (platoon leader/platoon sergeant)	Partial
	03. Orient vehicles and commanders designate initial fighting positions	Partial
	04. Perform troop-leading procedures after directing vehicle commander into their positions (platoon leader, platoon sergeant, and tank commanders)	Partial
	05. Prepare a platoon fire plan and forward it to company (platoon leader)	Yes
	06. Establish local security by manning OPs locations designated by the platoon leader (platoon personnel)	No
	07. Prepare primary, alternate, and supplementary fighting positions	Partial
	08. Prepare sketch range cards for primary, alternate, and supplementary fighting positions (TCs/gunners)	Partial
	09. Rehearse movement to, from, and within the BP, if time allows	Partial

ARTEP TASK	TASK/SUBTASK	
k. 5-III-2-4-4	Occupy a battle position	
	01. Perform tactical planning	Yes
	02. Issue a five-paragraph OPORD	Yes
	03. Do not exceed the 1/3 rule when planning for the operation	Yes
	04. Submit an initial fire plan to company commander within 30 minutes	Yes
	05. Conduct movement to the BP IAW movement and BP occupation plans and prescribed times	Partial
	06. Occupy the BP	Partial
	07. Prepare tank fighting positions	Partial
	08. Establish chemical agent alarm systems through the platoon within 90 minutes	No
	09. Establish hot loops and wire or radio communications to OPs (platoons/ sections)	No
	10. Coordinate with adjacent tanks and platoons	Partial
	11. Reconnoiter subsequent BPs to include routes to and from battle positions	Partial
	12. Complete rehearsals and necessary preparations and markings of BPs	Partial
	13. Emplace local obstacles that support the platoon battle positions	Partial
	14. Perform immediate emplacement of reinforcing obstacles upon effective attachment of assets	Partial
	15. Perform minor BP adjustments	Partial
	16. Execute maintenance, resupply, and rest plans as the situation permits	No
	17. Prepare to conduct one or all of the following actions:	Partial
	a. Deliver effective fires on targets IAW the designated fire control techniques (TRP, engagement area, etc.) indicated on respective execution matrices	
	b. Conduct long-range observation from covered and concealed positions	
	c. Move within the BP on concealed routes so as to avoid detection	
	d. Identify positively terrain features associated with graphic control measures, under all visibility conditions	

ARTEP TASK	TASK/SUBTASK	
1. 5-III-2-4-5	Displace to a subsequent battle position	
	01. Transport all wounded personnel to the subsequent position	No
	02. Move wounded soldiers that cannot be transported to the subsequent battle position by most practical means	No
	03. Establish a plan for evacuation in conjunction with emergency resupply	Partial
	04. Recover or destroy all disabled equipment according to unit SOP	Partial
	05. Cover maneuver elements by overwatching fires at all times	Yes
	06. Conceal move by use of smoke (VEESS and smoke grenade launchers) and indirect fires	Partial
	07. Perform the mission in subsequent battle position	Partial
m. 5-III-2-4-6	Reconnoiter a battle position	
	01. Perform reconnaissance on subsequent battle positions	Partial
	02. Prepare a plan for each BP	Partial
	03. Select covered/concealed routes on trafficable soil	Partial
	04. Select primary, alternate, and supplementary fighting positions	Partial
	05. Select routes to and from the primary, alternate, and supplementary fighting positions	Partial
	06. Select positions which afford long-range fields of fire and flank shots	Yes
	07. Select positions which provide cover and/or reverse slope concealment	Partial
	08. Select at least one OP position	Partial
	09. Ensure that designated TRPs are within range of the weapon systems	Yes
	10. Mark obstacles on a map or overlay and forward it to the commander	Yes
n. 5-III-2-4-7	Perform platoon fire distribution and control	
	01. Distribute fires within the platoon	Yes
	02. Perform fire planning to control fires (platoon leader)	Yes
	03. Perform the following actions	
	a. Avoid target overkill	Yes
	b. Destroy all targets within the platoon sector of fire and engagement area	Yes
	c. Conserve ammunition	Yes

ARTEP TASK	TASK/SUBTASK	
	d. Provide movement and target engagement security by using the organic smoke systems	No
o. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
p. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guard	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
q. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes

ARTEP TASK	TASK/SUBTASK	
r. 5-III-2-6-3	Perform visual surveillance	
	01. Assign personnel to perform the surveillance (platoon leader/sergeant)	Partial
	02. Occupy position (assigned personnel)	Partial
	03. Change observers every 20-30 minutes based upon tactical situation and climate	Partial
s. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
t. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial
	a. Establish communications with platoon elements and higher headquarters	
	b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously	
	c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown	

4. TRAINING AND EVALUATION SCHEDULE

Friendly

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of Warning Order	H-120	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues Situation, Warning Order, and CEOI PLT LDR
b. Plt Ldr performs tactical planning/recon	H-115	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3	

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
c. Plt Ldr issues OPOD	H-80 (Note 1)	Tng Facility	5-III-2-4-4	Instructor evaluates order for accuracy and completeness. Tape record if desired
d. Platoon stand-to activities/ prepares for departure	(Note 2)	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
e. Platoon occupies initial battle position	(Note 2, 3)	ES796975	5-III-2-4-4 5-III-2-4-2	
f. Platoon improves initial battle position	(Note 3)	ES796975	5-III-2-4-1	
g. Platoon reconnoiters subsequent battle position	Note 4	ES763979	5-III-2-4-6	
h. Platoon prepares subsequent battle positions	Note 4	ES763979	5-III-2-4-3	
i. Platoon conducts rehearsals for current mission	Note 4	Tng Facility	5-III-2-3-6	
j. Platoon performs platoon fire distribution and control	C-hour (Note 5)	ES796975	5-III-2-4-6	
k. Platoon displaces to subsequent battle position	(Note 6)	From ES796975 To ES763979	5-III-2-4-5 5-III-2-2-1	
l. Platoon occupies subsequent battle position	(Note 6)	ES763979	5-III-2-4-2 5-III-2-4-4	
m. Platoon performs platoon fire distribution and control	(Note 6)	ES763979	5-III-2-4-6	

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
n. Platoon displaces to subsequent battle position	(Note 6)	From ES763979 To ES734006	5-III-2-2-1 5-III-2-4-5	
o. Platoon occupies subsequent battle position	(Note 6)	ES734006	5-III-2-4-2 5-III-2-4-2	
p. Platoon performs platoon fire distribution and control	(Note 6)	ES734006	5-III-2-4-6	

Note 1 - This is not-later-than-time to comply with the 1/3 rule

Note 2 - These times will be based upon the platoon leader's instructions. These activities could occur prior to the OPORD.

Note 3 - The instructor can adjust the amount of time available for the occupation and improvement of battle positions.

Note 4 - The platoon may not accomplish all the events listed based upon a combination of experience/expertise, time management and time allowed by the instructor.

Note 5 - C-hour is the time of initial contact with the OPFOR.

Note 6 - The time for these events is based upon the success of the defense and orders from the company commander on displacing to subsequent battle positions.

OPFOR Meeting Engagement

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
a. Initial Contact (Combat Reconnaissance Patrol) (CRP)	C+0	ES829987	OPFOR moves 3 BMPs from Licksillet (ES829987) along Route 1238 until ES824981 then cross country forward ES809978. OPFOR will seek cover/concealment upon being engaged. (Each vehicle will represent one vehicle at this state. Vehicles will come at approximately 5-15 KPH.)

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
b. Advanced Party Engaged	C+20	ES829987	OPFOR moves 3 MR platoons (3 BMPs) and 1 tank platoon (1 T72) from Licksillet along the same path as the CRP. Vehicles will move at approximately 15 MPH. Hit probability should be set at 15-20% with kill set at approximately 90+%.
c. Advance Guard Main Force Engaged	C+60	ES829987	OPFOR moves 2 tank platoons (2 T72s), 6 MR platoons (6 BMPs) an engineer platoon (1 BMP) and an antitank platoon (1 BMP) from Licksillet along the same route as Recon Patrol and Advanced Party. Vehicles will move at approximately 15 MPH. Hit probability should be set at 15-20% with kill probability set at approximately 90+%.
d. OPFOR (Secondary Attack/Zone of Advance	C+0	ES829987	<p>Each vehicle represents one company. OPFOR should advance at approximately 15 MPH. Hit probability should be set at 5% with kill set at approximately 90+%. A possible artillery fire plan outlining the time for an artillery fire preparation is shown below:</p> <p>C-25 Heavy surprise concentration on the entire depth of the defense</p> <p>C-20 Destruction fire against strong points, CPs/OPs, headquarters, and artillery sites. Priority fires against enemy's first echelon.</p> <p>C-15 Conventional suppressive fire against enemy first echelon positions.</p> <p>C-5 Heavy, surprise concentrations against enemy strong points.</p>

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
			C-hour Artillery fires in support of the attack begin.
d. OPFOR (Main Attack) First Echelon	C	ES829987 ES717019	Each vehicle represents one company. OPFOR should advance at approximately 15 KRH. Hit probability should be set at 5% with kill set at approximately 90+%.
Second Echelon	C+10		Second echelon can be represented during advance on subsequent battle positions by reducing number of vehicles remaining in first echelon. Should follow by about 1500m. Use the same artillery fire plan recommended in the Secondary Attack but with more being fired.

5. SITUATION. The following situation and OPORD can be used to initiate this scenario.

Your unit is in a hide position on BP 15B. Your platoon is at full strength, well-rested and fully supplied. You are currently in security readiness condition (REDCON) 3 (Reduced Security). OPFOR elements to your immediate front have assumed a defensive posture. The company commander said that the S2 expects a Motorized Rifle Division to be committed in the brigade sector in the next 2-4 hours.

OPORD

Task Organization: (Co/Tm Level)

1. Situation

a. Enemy Forces. (enemy overlay - drawn on commander's map sheet.)

b. Friendly Forces.

- (1) Bn/TF _____ is conducting defensive operations.
- (2) Co/Tm _____ is to our left flank occupying BP 07.
- (3) Co/Tm _____ to our right flank occupying BP 09.
- (4) Bn/TF _____ to our rear as a reserve.
- (5) _____ is DS to our Bn/TF.

2. Mission

Co/Tm _____ will defend by BPs from ES801985 to ES802957 NLT (Time).

3. Execution

a. Concept of the Operation (Operation overlay - drawn on commander's map sheet).

(1) Maneuver. Co/Tm _____ occupies initial defensive positions on BP 45. _____ Plt occupies BP 45A. _____ Plt occupies BP 45B. _____ Plt occupies BP 45C. Co/Tm _____ will engage the enemy in EA ALPHA. Displace to BP 55 and 65 on order.

(2) Fires. (Artillery targets - drawn on commander's map sheet.)

Priority of fires to _____ Plt initially.

b. _____ Plt:

- (1) Occupy BP 45A. Orient fires into EA ALPHA from target 201 to 203.
- (2) Prepare BP 55A. Orient fires into EA CHARLIE from TRP 214 to 217.
- (3) Recon BP 65A. Orient fires into EA DELTA from TRP 221 to 223.
- (4) On order, displace to BP 45A 8C and/or 55A.

c. _____ Plt:

(1) Occupy BP 45B. Orient fires into EA ALPHA from TRP 206 to 203 and into EA BRAVO from TRP 203 to 207.

(2) Prepare BP 55B. Orient fires in EA CHARLIE from TRP 215 to 217.

(3) Recon BP 65B. Orient fires in EA DELTA from TRP AA2210 to 223.

(4) On order, displace to BP 45B and/or 55B.

d. _____ Plt:

(1) Occupy BP 45C. Orient fires into EA BRAVO from TRP 203 to 205.

(2) Prepare BP 55C. Orient fires in EA CHARLIE from TRP 213 to 218.

(3) Recon BP 65C. Orient fires in EA CHARLIE from TRP 221 to 225.

(4) On order, displace to BP 45C and/or 55C.

e. Coordinating Instructions

(1) ADA status is weapons free.

(2) Establish auto-chemical alarms, continuous monitoring in effect.

(3) MOPP level _____ in effect.

(4) Be prepared to counterattack, on order, to regain BPs.

4. Service Support

a. Bn/TF trains located at 721981. Co CBT trains located at 792969.

b. Ammo and fuel cache located at grid 759987.

5. Command and Signal.

a. Signal.

(1) CEOI _____ in effect.

(2) Emergency signal to withdraw to next BP is _____.

b. Command.

- (1) Cmd w/_____ Plt initially.
- (2) XO w/_____ Plt.

TARGET LIST

<u>LN #</u>	<u>TGT #</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
1	AA2201	Road Junction	82889869
2	AA2202	Road Junction	81709939
3	AA2203	Road Junction	81969657
4	AA2204	Road Junction	80159605
5	AA2205	Hill Top	79889771
6	AA2206	Rail Junction	78559700
7	AA2207	Road Junction	76689695
8	AA2208	Road Junction	76019834
9	AA2209	Road Junction	75670016
10	AA2210	Road Junction	74520113
11	AA2211	Railroad Crossing	72869931

6. SIMCAT FILE NAME: DEF1.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Defense #1 exercise, select initial condition set B, file number 2, during system start-up.

APPENDIX M
HASTY DEFENSE #2

APPENDIX M HASTY DEFENSE #2

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Appendix M

HASTY DEFENSE #2

1. PREREQUISITE TRAINING

Platoon Leader and Platoon Sergeant should:

- a. Review STX B in FC 17-15-1 and performance standards listed in Paragraph 3.
- b. Review FC 17-15 for further explanation of tasks as needed.
- c. Review Tank Company and Platoon SOPs to identify elements that may apply to STX B and platoon tasks.
- d. Talk through possible STX situations and tasks to gain a common understanding of doctrine. Practice "what-if" drills.
- e. Walk through similar situations using a terrain board exercise to practice procedures and tasks in a scenario context.

2. LEADER TRAINING

a. Training exercises with the attached scenarios may be used as part of the training effort to prepare for a field exercise. They may also provide part-task training as a substitute or sustainment training when field training is not possible.

b. The following leader tasks will be learned or reinforced by completion of the defense exercises:

- (1) Plan combat operations.
- (2) Provide command control of a unit.
- (3) Collective tasks from FC 17-15-1 and individual tasks from FM 17-19 (E/K) (Level 4) that support STX B.

c. Main teaching points:

(1) Receive FRAGO. In the defense, check the sectors of fire assigned to other elements of the team to determine how they overlap and relate to your sector. Range limits for direct fire engagement, likely enemy movements, target priorities, and fire distribution and control in overlapping sectors are important to understanding your platoon's role. Request clarification and additional guidance as needed for planning. Understand the priorities established in the mission among goals of holding position, minimizing losses, reducing the enemy force, restricting enemy freedom of action, and conserving resources.

(2) Reconnaissance. In conducting map reconnaissance, identify the enemy avenues of approach, routes into and out of your BP and hide positions, rally points, positions for OPs (day and night), support routes and locations (resupply, medical, etc.). Analyze the terrain thoroughly to identify fields of fire and dead spaces, to select fighting positions, to relate positions to fire control measures, and anticipate enemy actions and counteractions. Recognize problems posed by terrain features and determine if additional TRP, adjustments to the BP, or other solutions (e.g., obstacles, mines) are needed.

(3) Tactical Planning. Based on the task priorities established by SOP, the situation and mission, and the time available, backward plan to be ready in position at the designated time. Plan and allocate personnel to complete tasks concurrently. Apply the factors of METT given on p 2-8 of FC 17-15 to plan the sequence of events in preparing and conducting the defense. Mentally rehearse the progression of events during the battle and the commands and reports you expect to give.

(4) Troop Leading. On receipt of a FRAGO, issue a WO to alert your platoons and get preparations started. Indicate mission and time, actions required, and the place and time further orders will be given (what, when, who, why, how). Delegate tasks and set timelines for actions required. In the defense, you may have to give a FRAGO to prepare the initial BP, then recon subsequent position, complete tactical planning, and give a detailed OPOD later. If time does not permit the TCs to see their subsequent positions, the OPOD must be particularly detailed and explicit. Ensure that the Plt Sgt and TCs copy the graphic control measures correctly before you depart on reconnaissance. Check the TCs range cards to make sure they execute the platoon fire plan correctly. If time permits, inspect each position and rehearse the TC's reactions to planned commands controlling platoon fires and movements. Ensure that the Plt Sgt understands the concept of the defensive operation and is prepared to take over command.

(5) Stand-to-Activities (Day). Ensure all equipment is stowed and personnel accounted for. Establish communications, start engines together, check status of vehicles, and give a SITREP before moving out.

(6) Occupy Battle Position. The normal priority of tasks is to position tanks, establish security, camouflage, and establish wire communication (latter two not simulated). Two hours to contact should allow preparation of range cards and platoon fireplan and coordination with adjacent units. Fireplan should include entrance/egress routes, rally point at start of maximum ranges and dead spaces, Plt TRPs and list of tanks able to fire on each, hide and OP positions, and coordinating signals and/or commo with adjacent platoons to control fires in the overlapping area.

(7) Reconnaissance of a Battle Position. When TCs cannot accompany you to a subsequent battle position, take along a crew member from the Plt Sgts section so that he will be able to guide tanks in that section to their proper positions. Alternatively, you should mark positions and entrance points on the routes to the positions. If tanks are misplaced, your fireplan

may not work as intended. If some positions offer cover, but not concealment, concealed hide positions should be found nearby. Try to choose routes that will not reveal the position through tracks or broken vegetation. If this is not possible, choose additional routes to be traveled over to leave deceptive markings. Consider possibilities for counterattack and pursuit of remnants of the enemy force. Locate temporary fighting positions along the route that offer the opportunity for sudden appearance, disappearance, and reappearance at unexpected locations.

(8) Surveillance Activity. In a defensive position behind forward positions, a weapons posture should be adopted suitable to the situation. Try to confirm the friend/foe status of possible targets. Report activity and control the Plt to avoid fire on friendly forces and premature exposure of the position.

(9) Perimeter Security/OPs. Preparation for night operations should start as soon as possible after occupation of the BP and whenever the platoon may remain on the position overnight. Plans for limited visibility conditions should be included in the OPORD if possible, or an additional FRAGO given later. The fireplan must be adjusted based on the capabilities of NODs available. OPs must be thoroughly briefed on security and reporting procedures.

(10) Stand-to Activities (Night). In the defense, stand-to should occur BMNT. Stand-to in hide positions should be completed while OPs remain in position. Recall OPs when vehicles move to their fighting position.

(11) React to Indirect Fire. Button up, order MOPP-4, and move to evade impact area while continuing to cover assigned sector. Return to fighting positions as soon as possible. When chemical agents are detected, give alarm and NBC-1 report.

(12) Provide Plt Command and Control. Request authentication of operating instructions. On receipt of FRAGO, be alert to elements that alter or expand previous orders and that require changes from the prior OPORD to the platoon. Give a FRAGO that is a brief, accurate, clear, and establishes priorities and sequence when more than one task must be accomplished. Stress and confusion are reduced by getting the platoon moving on a definite course of action.

(13) Displace to Battle Position. Move rapidly on planned route. Transport wounded and arrange evacuation and resupply as needed on subsequent position. Minimize delay by unexpected obstacles or unplanned events. Use smoke as necessary to conceal movement.

(14) Cross Chemically Contaminated Area. Maintain MOPP level required by the danger. Determine the nature and persistency of the agent and the boundaries of the area to the extent possible with available equipment. Plan decontamination actions consistent with mission requirements. When contacting friendly elements, warn of possible persistent contamination.

(15) Actions at a Halt/Evacuate Casualty. Identify contact as friendly element, warn of possible contamination, maintain security, minimize delay, and resume mission.

(16) Occupy Battle Position. In a hasty occupation, move the tanks directly to turret down position. Ensure the TCs are properly oriented to the TRPs, routes, and other important terrain features. When oriented, move to hull down fighting positions and begin to prepare range cards and Plt fireplan. Continue to improve the position with the time and resources available. Move back to hide positions as soon as possible. Prepare primary positions and submit fireplan in 30 minutes.

(17) Occupy Covered/Concealed Positions. To deter recognition of positions by OPFOR, avoid leaving signs along routes to positions. Enter from rear, use natural terrain patterns and camouflage material, and maintain concealment discipline. When preparations are complete, move back from fighting positions to more fully screened positions and turn off engines, leaving OPs to warn of enemy approach.

(18) Fire Distribution and Control. Ambush tactics may be used when adequate force is available to rapidly destroy the enemy force. Issue a Plt fire command, ensure fire is withheld until command of execution, and shift fires to avoid overkill. Remain in position to sustain a high rate of fire as long as enemy cannot return effective fire. Cease fire promptly when targets are destroyed. Shift one section to supplementary positions to regain LOS to targets blocked by destroyed vehicles or pinned in covered positions, while a section continues watch on escape routes.

(19) Maintain Contact with the OPFOR. When so ordered, maintain contact through fire and movement to pursue and complete destruction of the OPFOR. Although speed is paramount, avoid leaving signs that would subsequently reveal the fighting positions. If necessary, take up new positions when the Plt returns. Report destruction of targets or breaks in contact.

(20) Occupy Battle Position/Conduct Overwatch. Continue to avoid revealing signs in reoccupying a position. Positively identify withdrawing element when providing overwatch. Coordinate fireplans with unit established in an adjacent position.

(21) Platoon Fire Distribution and Control. Ensure that the platoon fire command is unambiguous in designating a target or group of targets for each tank. Use control measures and fire patterns to get as many flank shots as possible. Move after firing 1-2 rounds per target in the initial engagement, if there are a large number. If there are less than four targets, look for an extra command or support vehicle in your sector or double up on the most dangerous target. Direct engagement by platoon, section, or within section according to the needs of the situation, if not preplanned. When you see the OPFOR preparing to fire by platoon on one tank, order the TC to move while you continue to engage with the remainder of the platoon. Use all available assets, e.g., indirect fire obstacles, terrain, to isolate portions of the enemy force to be able to engage the enemy piecemeal with direct fire. Use .50 cal simultaneously on light armor, if main guns are targeted. Report

contact and engagement, platoon movement and results of fire, and enemy activity. As the battle proceeds, adjust the platoon fire distribution to implement the commanders plan and orders. Be alert to possibilities of gaining advantage by counterattacking by fire from unplanned positions, or by counterattacking by fire and movements to create surprise.

(22) Movement Security Using Smoke. Planning for use of smoke should be an integral part of the defense plan. Direct use of on-board smoke as needed to cover firing positions when moving to alternate or supplementary positions. Ensure that exhaust smoke either covers the area entirely or is cut off soon enough to avoid revealing the tanks' locations in the new positions. If available, use smokepots in front of the positions in preference to on-board smoke. Be aware of wind strength and direction and the effects of wind in moving and dissipating the smoke. Use artillery smoke to screen movement away from the battle position when disengaging. Use on-board smoke only in emergencies, but try to avoid revealing the movement route when it is used.

(23) Break Contact with the Enemy. Make maximum use of terrain to shield the platoon's movement. Use artillery fire and smoke to slow the occupation of the battle position and pursuit. If overwatch is provided by another unit, move rapidly and avoid engagement. If not overwatched, bounding by section may be required until contact is broken.

3. PERFORMANCE STANDARDS

Note. Yes - task can be performed on SIMCAT.

Partial - part of the task can be performed on SIMCAT.

No (+) - Only a small part of the task can be performed on SIMCAT.

No - the task can not be performed on SIMCAT.

ARTEP TASK	TASK/SUBTASK	
a. 5-III-2-1-1	Perform assembly area activities	
	01. Move into assembly area	Partial
	02. Establish perimeter security	Partial
	03. Establish communications by wire, visual signals, or messenger	No (+)
	04. Perform activities with emphasis placed on maintenance which cannot be accomplished during combat	No (+)
	05. Prepare for combat to include boresighting, zeroing, test firing	No (+)
	06. Plan for the next mission	Partial
b. 5-III-2-2-1	07. Ensure that personnel requirements are cared for	Partial
	Disengage from the OPFOR	
	01. Develop a plan for disengagement (platoon leader)	Yes
	02. Initiate the disengagement (platoon leader)	Yes

ARTEP TASK	TASK/SUBTASK	
	03. Conduct disengagement and withdrawal	Partial
	04. Use all aids for disengagement from the enemy	Partial
	05. Lay a close-in screen for the disengagement	Partial
c. 5-III-2-3-1	Perform platoon leader's reconnaissance	
	01. Analyze the mission to be accomplished	Yes
	02. Determine the area in which the unit will operate	Yes
	03. Conduct a map reconnaissance	Yes
	04. Perform a ground reconnaissance	No
	05. Determine elements of information from map reconnaissance	Yes
d. 5-III-2-3-2	Provide command and control of a platoon	
	01. Communicate the mission and concept of operation to subordinate leaders by FRAGO or OPORD. (Platoon leader)	Yes
	02. Make decisions and initiate actions that reflect guidance from the platoon leader (platoon sergeant and TCs)	Yes
	03. Inform all personnel of the platoon mission	Partial
e. 5-III-2-3-3	Perform tactical planning	
	01. Determine the platoon's mission	Yes
	02. Develop course of action for the platoon based upon the company plan and the factors of METT-T	Yes
	03. Select the best course of action for mission accomplishment based on advantages and disadvantages	Yes
	04. Prepare warning order, FRAGO and OPORD	Yes
f. 5-III-2-3-5	Perform contact point activities	
	01. Navigate to contact point	Yes
	02. Secure contact point with available security forces	Yes
	03. Communicate to other contact party	Yes
	04. Navigate through the appropriate passage lane	Yes
g. 5-III-2-3-6	Conduct rehearsals for current mission	
	01. Conduct rehearsals which do not interfere with subordinate unit troop-leading procedures and/or preparations for the actual mission	Yes

ARTEP TASK	TASK/SUBTASK	
	02. Complete the rehearsal per the time schedule	Yes
	03. Identify and correct mistakes during the rehearsals	Yes
h. 5-III-2-4-1	Improve battle positions	
	01. Provide hull-down fighting positions for each vehicles	No
	02. Use any natural obstacle to increase the defendability of the battle position	Partial
	03. Emplace artificial obstacles	No
	04. Employ mines or wire to slow, turn or canalize the OPFOR forward of the battle position	Partial
i. 5-III-2-4-2	Establish perimeter security	
	01. Place vehicles and establish perimeter (platoon leader/platoon sergeant)	Partial
	02. Occupy position given by platoon leader	Partial
	03. Establish fields of fire (platoon leader)	Partial
j. 5-III-2-4-3	Prepare subsequent battle positions	
	01. Reconnoiter route(s) to subsequent battle position(s) for cover/concealment and trafficability (platoon leader/platoon sergeant)	Partial
	02. Reconnoiter vehicle positions, firing positions and OP locations (platoon leader/platoon sergeant)	Partial
	03. Orient vehicles and commanders designate initial fighting positions	Partial
	04. Perform troop-leading procedures after directing vehicle commander into their positions (platoon leader, platoon sergeant, and tank commanders)	Partial
	05. Prepare a platoon fire plan and forward it to company (platoon leader)	Yes
	06. Establish local security by manning OPs locations designated by the platoon leader (platoon personnel)	No
	07. Prepare primary, alternate, and supplementary fighting positions	Partial
	08. Prepare sketch range cards for primary, alternate, and supplementary fighting positions (TCs/gunners)	Partial
	09. Rehearse movement to, from, and within the BP, if time allows	Partial

ARTEP TASK	TASK/SUBTASK	
k. 5-III-2-4-4	Occupy a battle position	
	01. Perform tactical planning	Yes
	02. Issue a five-paragraph OPORD	Yes
	03. Do not exceed the 1/3 rule when planning for the operation	Yes
	04. Submit an initial fire plan to company commander within 30 minutes	Yes
	05. Conduct movement to the BP IAW movement and BP occupation plans and prescribed times	Partial
	06. Occupy the BP	Partial
	07. Prepare tank fighting positions	Partial
	08. Establish chemical agent alarm systems through the platoon within 90 minutes	No
	09. Establish hot loops and wire or radio communications to OPs (platoons/ sections)	No
	10. Coordinate with adjacent tanks and platoons	Partial
	11. Reconnoiter subsequent BPs to include routes to and from battle positions	Partial
	12. Complete rehearsals and necessary preparations and markings of BPs	Partial
	13. Emplace local obstacles that support the platoon battle positions	Partial
	14. Perform immediate emplacement of reinforcing obstacles upon effective attachment of assets	Partial
	15. Perform minor BP adjustments	Partial
	16. Execute maintenance, resupply, and rest plans as the situation permits	No
	17. Prepare to conduct one or all of the following actions:	Partial
	a. Deliver effective fires on targets IAW the designated fire control techniques (TRP, engagement area, etc.) indicated on respective execution matrices	
	b. Conduct long-range observation from covered and concealed positions	
	c. Move within the BP on concealed routes so as to avoid detection	
	d. Identify positively terrain features associated with graphic control measures, under all visibility conditions	

ARTEP TASK	TASK/SUBTASK	
1. 5-III-2-4-5	Displace to a subsequent battle position	
	01. Transport all wounded personnel to the subsequent position	No
	02. Move wounded soldiers that cannot be transported to the subsequent battle position by most practical means	No
	03. Establish a plan for evacuation in conjunction with emergency resupply	Partial
	04. Recover or destroy all disabled equipment according to unit SOP	Partial
	05. Cover maneuver elements by overwatching fires at all times	Yes
	06. Conceal move by use of smoke (VEESS and smoke grenade launchers) and indirect fires	Partial
	07. Perform the mission in subsequent battle position	Partial
m. 5-III-2-4-6	Reconnoiter a battle position	
	01. Perform reconnaissance on subsequent battle positions	Partial
	02. Prepare a plan for each BP	Partial
	03. Select covered/concealed routes on trafficable soil	Partial
	04. Select primary, alternate, and supplementary fighting positions	Partial
	05. Select routes to and from the primary, alternate, and supplementary fighting positions	Partial
	06. Select positions which afford long-range fields of fire and flank shots	Yes
	07. Select positions which provide cover and/or reverse slope concealment	Partial
	08. Select at least one OP position	Partial
	09. Ensure that designated TRPs are within range of the weapon systems	Yes
	10. Mark obstacles on a map or overlay and forward it to the commander	Yes
n. 5-III-2-4-7	Perform platoon fire distribution and control	
	01. Distribute fires within the platoon	Yes
	02. Perform fire planning to control fires (platoon leader)	Yes
	03. Perform the following actions	
	a. Avoid target overkill	Yes
	b. Destroy all targets within the platoon sector of fire and engagement area	Yes
	c. Conserve ammunition	Yes

ARTEP TASK	TASK/SUBTASK	
	d. Provide movement and target engagement security by using the organic smoke systems	No
o. 5-III-2-5-5	Perform movement security using smoke systems	
	01. Recognize situation when smoke will benefit the platoon (platoon leader)	Partial
	02. Employ organic systems such as smoke grenades and onboard vehicular smoke systems	Partial
	03. Retain movement orientation	Partial
	04. If organic systems will not do the job, request smoke/indirect fire support from company/team	Partial
	05. Request resupply of smoke munitions as required	Partial
p. 5-III-2-5-6	Perform a tactical road march	
	01. Report passage of critical points	Yes
	02. Perform movement within time specified in OPORD without exceeding the catch-up speed	Yes
	03. Maintain intervehicular distances	Partial
	04. Move on route of march except:	Yes
	a. React to OPFOR	
	b. Bypass obstacles	
	05. Orient crew weapon system to provide 360° security overlap	Yes
	06. Maintain air guard	No
	07. Perform a linkup with the quartering party/contact point elements without causing a movement stoppage of the remainder of the column	Partial
	08. Execute actions at halts (IAW 5-III-2-5-1)	Partial
	09. Meet enemy contact with the immediate execution of action drills by both the element under fire and by those close elements with freedom to maneuver	Yes
q. 5-III-2-5-7	Establish all-around movement security	
	01. Establish 360° vehicle security by assigning crew members areas of responsibility	Partial
	02. Employ smoke systems as necessary (see Task 5-III-2-5-5)	Partial
	03. Use appropriate techniques of movement	Yes

ARTEP TASK	TASK/SUBTASK	
r. 5-III-2-6-3	Perform visual surveillance	
	01. Assign personnel to perform the surveillance (platoon leader/sergeant)	Partial
	02. Occupy position (assigned personnel)	Partial
	03. Change observers every 20-30 minutes based upon tactical situation and climate	Partial
s. 5-III-2-12-10	React to indirect fire	
	01. React to indirect fire immediately	Partial
	02. Monitor NBC conditions	Partial
	03. Maintain communications with higher headquarters	Yes
t. 5-III-2-12-13	Perform stand-to activities	
	01. Ensure that personnel are fully awake and ready to react to any given order	Partial
	02. Ensure that all tools, equipment and personal effects are secured and properly stowed	Partial
	a. Establish communications with platoon elements and higher headquarters	
	b. Use countdown methods (or other appropriate method to ensure all vehicles are started simultaneously	
	c. Provide the commander with a status of operational/nonoperational vehicles report within two minutes following end of countdown	

4. TRAINING AND EVALUATION SCHEDULE

Friendly

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
a. Receipt of Warning Order	H-120	Tng Facility	5-III-2-3-2 5-III-2-3-3	Instr/Controller issues Warning Order, CEOI, map w/overlay to PLT LDR
b. Plt Ldr performs tactical planning/recon	H-115	Tng Facility	5-III-2-3-1 5-III-2-3-2 5-III-2-3-3 5-III-2-4-4	

	<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
c.	Plt Ldr issues OPORD	H-80 (Note 1)	Tng Facility	5-III-2-4-4	Instructor evaluates order for accuracy and completeness. Tape record if desired
d.	Platoon stand-to activities/ prepares for departure	(Note 2)	Tng Facility	5-III-2-12-13	Instructor checks commo and start-up procedures
e.	Platoon occupies initial battle position	(Note 2, 3)	ES745001	5-III-2-4-4 5-III-2-4-2	
f.	Platoon improves initial battle position	(Note 3)	ES745001	5-III-2-4-1	
g.	Platoon reconnoiters subsequent battle position	Note 4	ES790974	5-III-2-4-6	
h.	Platoon prepares subsequent battle positions	Note 4	ES790974	5-III-2-4-3	
i.	Platoon conducts rehearsals for current mission	Note 4	Tng Facility	5-III-2-3-6	
j.	Platoon performs platoon fire distribution and control	C-hour (Note 5)	ES745001	5-III-2-4-6	
k.	Platoon displaces to subsequent battle position	(Note 6)	From ES745001 to ES790974	5-III-2-4-5 5-III-2-2-1	
l.	Platoon occupies subsequent battle position	(Note 6)	ES790974	5-III-2-4-2 5-III-2-4-4	
m.	Platoon performs platoon fire distribution and control	(Note 6)	ES790974	5-III-2-4-6	

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>Standard</u>	<u>Remarks</u>
n. Platoon displaces to subsequent battle position	(Note 6)	From ES790974 to ES804956	5-III-2-2-1 5-III-2-4-5	
o. Platoon occupies subsequent battle position	(Note 6)	ES804956	5-III-2-4-2 5-III-2-4-2	
p. Platoon performs platoon fire distribution and control	(Note 6)	ES804956	5-III-2-4-6	

Note 1 - This is not-later-than-time to comply with the 1/3 rule

Note 2 - These times will be based upon the platoon leader's instructions. These activities could occur prior to the OPORD.

Note 3 - The instructor can adjust the amount of time available for the occupation and improvement of battle positions.

Note 4 - The platoon may not accomplish all the events listed based upon a combination of experience/expertise, time management and time allowed by the instructor.

Note 5 - C-hour is the time of initial contact with the OPFOR.

Note 6 - The time for these events is based upon the success of the defense and orders from the company commander on displacing to subsequent battle positions.

OPFOR Meeting Engagement

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
a. Initial Contact (Combat Reconnaissance Patrol) (CRP)	C+0	ES717019	OPFOR moves 3 BMPs from road junction (ES717019) along secondary road until road junction (ES730014) then cross country toward ES745002. OPFOR will seek cover/concealment upon being engaged. (Each vehicle will represent one vehicle at this state. Vehicles will come at approximately 5-15 KPH.
b. Advanced Party Engaged	C+20	ES717019	OPFOR moves 3 MR platoons (3 BMPs) and 1 tank platoon (1 T72) from road junction along the same path as the CRP.

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
			Vehicles will move at approximately 15 MPH. Hit probability should be set at 15-20% with kill set at approximately 90+%.
c. Advance Guard Main Force Engaged	C+60	ES717019	OPFOR moves 2 tank platoons (2 T72s), 6 MR platoons (6 BMPs) an engineer platoon (1 BMP) and an antitank platoon (1 BMP) from road junction along the same route as Recon Patrol and Advanced Party. Vehicles will move at approximately 15 MPH. Hit probability should be set at 15-20% with kill probability set at approximately 90+%.
d. OPFOR (Secondary Attack/Zone of Advance	C+0	ES717019	<p>Each vehicle represents one company. OPFOR should advance at approximately 15 MPH. Hit probability should be set at 5% with kill set at approximately 90+%. A possible artillery fire plan outlining the time for an artillery fire preparation is shown below:</p> <p>C-25 Heavy surprise concentration on the entire depth of the defense</p> <p>C-20 Destruction fire against strong points, CPs/OPs, headquarters, and artillery sites. Priority fires against enemy's first echelon.</p> <p>C-15 Conventional suppressive fire against enemy first echelon positions.</p> <p>C-5 Heavy, surprise concentrations against enemy strong points.</p> <p>C-hour Artillery fires in support of the attack begin.</p>

<u>Event</u>	<u>Time</u>	<u>Location</u>	<u>OPFOR Instructions</u>
d. OPFOR (Main Attack) First Echelon	C	ES717019	Each vehicle represents one company. OPFOR should advance at approximately 15 KPH. Hit probability should be set at 5% with kill set at approximately 90+%. Second echelon can be represented during advance on subsequent battle positions by reducing number of vehicles remaining in first echelon. Should follow by about 1500m. Use the same artillery fire plan recommended in the Secondary Attack but with more being fired.
Second Echelon	C+10		
e. OPFOR (Secondary Attack/Zone of Advance)	C+0	ES829987	Each vehicle represents one company. OPFOR should advance at approximately 15 KPH. Hit probability should be set at 5% with kill set at approximately 90+%. A possible artillery fire plan outlining the time for an artillery fire preparation is shown below: C-25 Heavy surprise concentration on the entire depth of the defense C-20 Destruction fire against strong points, CPs/OPs, headquarters, and artillery sites. Priority fires against enemy's first echelon. C-15 Conventional suppressive fire against enemy first echelon positions. C-5 Heavy, surprise concentrations against enemy strong points. C-Hour Artillery fires in support of the attack begin.

5. SITUATION. The following situation and OPORD can be used to initiate this scenario.

Your unit is in a hide position on BP 15B. Your platoon is at full strength, well-rested and fully supplied. You are currently in security readiness condition (REDCON) 3 (Reduced Security). OPFOR elements to your immediate front have assumed a defensive posture. The company commander said that the S2 expects a Motorized Rifle Division to be committed in the brigade sector in the next 2-4 hours.

OPORD

Task Organization: (Co/Tm Level)

1. Situation

a. Enemy Forces. (enemy overlay - drawn on commander's map sheet.)

b. Friendly Forces.

(1) Bn/TF _____ is conducting defensive operations.

(2) Co/Tm _____ is to our left flank occupying BP 07.

(3) Co/Tm _____ to our right flank occupying BP 09.

(4) Bn/TF _____ to our rear as a reserve.

(5) _____ is DS to our Bn/TF.

2. Mission

Co/Tm _____ will defend by BPs from ES740995 to ES745009 NLT (Time).

3. Execution

a. Concept of the Operation (Operation overlay - drawn on commander's map sheet).

(1) Maneuver. Co/Tm _____ conducts a tactical road march to occupy initial defensive positions on BP 08. _____ Plt occupies BP _____. _____ Plt occupies BP _____. _____ Plt occupies BP _____. Co/Tm _____ will engage the enemy in EA CHARLIE. Displace to BP 18 and 28 on order. Conduct rearward passage of lines at grid _____ on order.

(2) Fires. (Artillery targets - drawn on commander's map sheet.)

Priority of fires to _____ Plt initially.

b. _____ Plt:

(1) Occupy BP 08C. Orient fires into EA CHARLIE from target 201 to 203.

(2) Recon/prepare BP 18C. Orient fires in EA GOLF from target 210 to 213.

(3) Recon/prepare BP 28C. Orient fires in EA KILO from target 220 to 224.

- (4) On order, displace to BP 18C and/or 28C.
- c. _____ Plt:
- (1) Occupy BP 08B. Orient fires into EA CHARLIE from target 201 to 204.
- (2) Recon/prepare BP 18B. Orient fires in EA GOLF from target 211 to 215.
- (3) Recon/prepare BP 28B. Orient fires in EA KILO from target 207 to AA2206.
- (4) On order, displace to BP 18B and/or 28B.
- d. _____ Plt:
- (1) Occupy BP 08A. Orient fires into EA CHARLIE from target 203 to 204.
- (2) Recon/prepare BP 18A. Orient fires in EA GOLF from target 213 to 215.
- (3) Recon/prepare BP 28A. Orient fires in EA KILO from target AA2208 to 223.
- (4) On order, displace to BP 18A and/or 28A.
- e. Coordinating Instructions
- (1) ADA status is weapons free.
- (2) Establish auto-chemical alarms, continuous monitoring in effect.
- (3) MOPP level _____ in effect.
- (4) Be prepared to counterattack, on order, to regain BPs.
4. Service Support
- a. Bn/TF trains located at 80939875. Co CBT trains located at 75450006.
- b. Ammo and fuel cache located at grid 79609775.
5. Command and Signal.
- a. Signal.
- (1) CEOI _____ in effect.
- (2) Emergency signal to withdraw to next BP is _____.

b. Command.

(1) Cmd w/_____ Plt initially.

(2) XO w/_____ Plt.

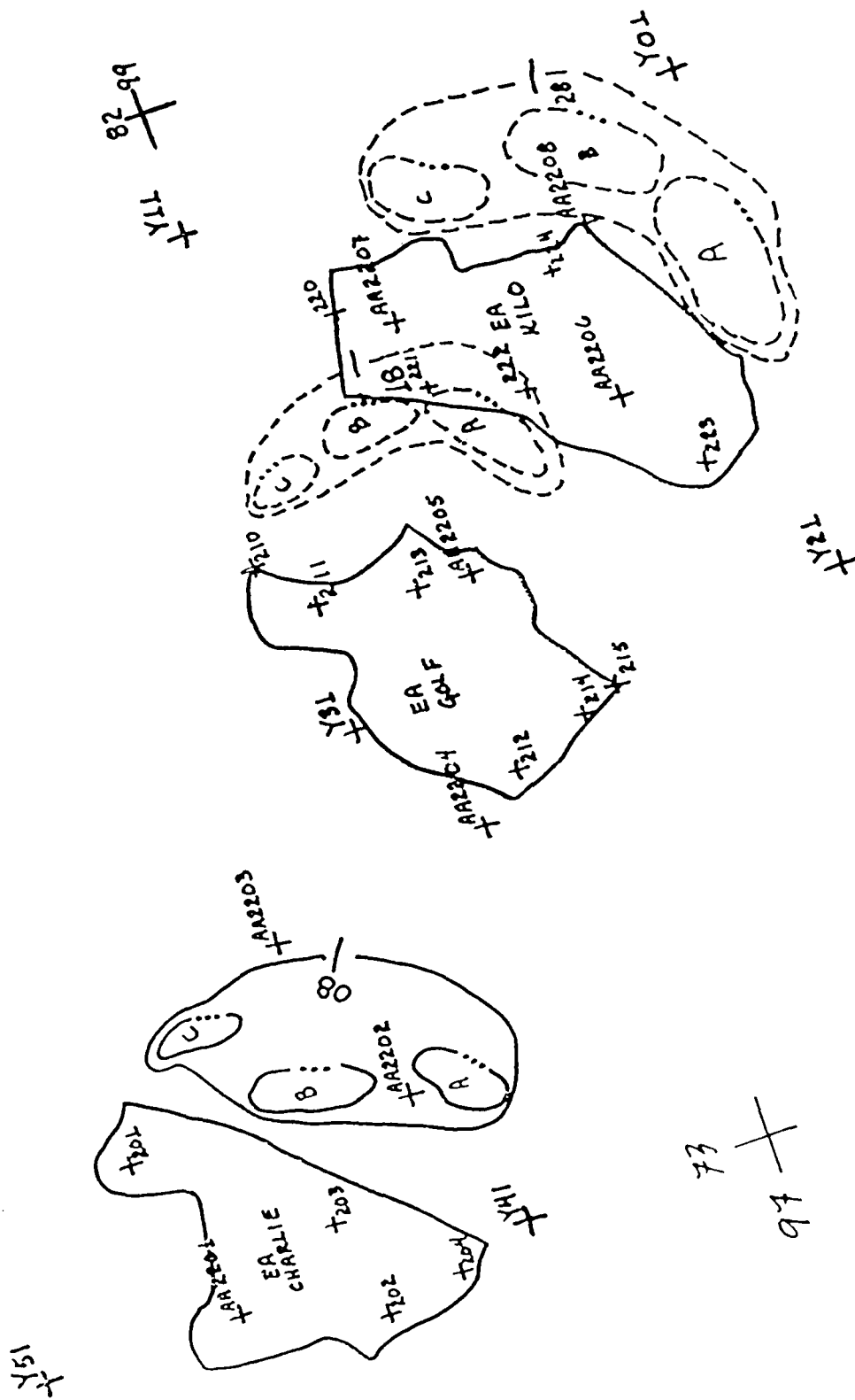


Figure M-1. Mission Overlay for Hasty Defense #2

TARGET LIST

<u>LN #</u>	<u>TGT #</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
1	AA2201	Road Junction	73000149
2	AA2202	Road Junction	74249957
3	AA2203	Road Junction	75660015
4	AA2204	Road Junction	75009832
5	AA2205	Hill Top	77899780
6	AA2206	Rail Junction	78799625
7	AA2207	Road Junction	79879772
8	AA2208	Road Junction	80129607

6. SIMCAT FILE NAME: DEF2.DAT

Begin the system start-up procedure, described in Appendix E (SIMCAT System Operating Instructions), at least 20 minutes before the platoon will begin movement. To conduct the Hasty Defense #2 exercise, select initial condition set B, file number 3, during system start-up.

END